

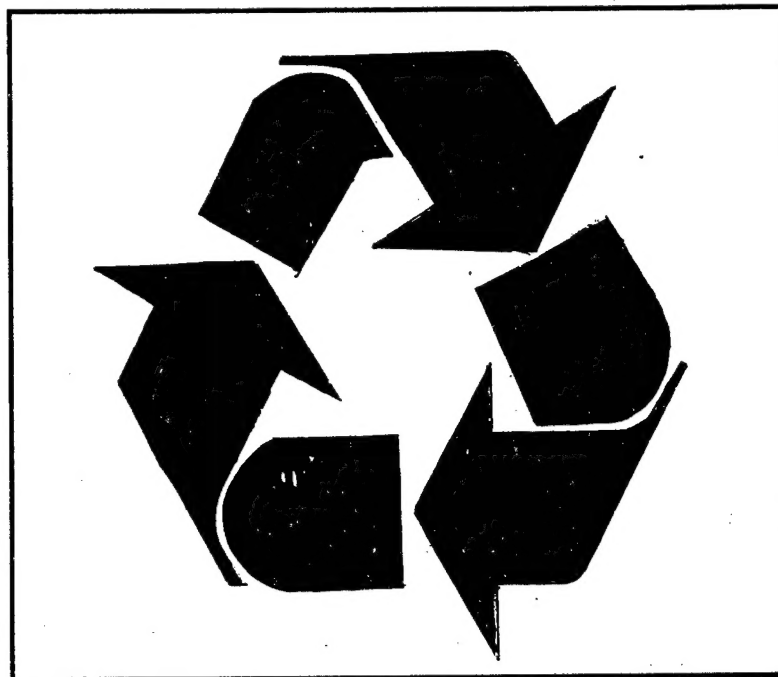
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**North Hartland Lake, Vermont  
Connecticut River Basin, Flood Control Project**

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**Solid Waste Management Plan**

RECYCLE CONSERVE RESOURCES



September 1996



**US Army Corps  
of Engineers**  
New England Division

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SOLID WASTE MANAGEMENT PLAN

NORTH HARTLAND LAKE, VERMONT,  
FLOOD CONTROL PROJECT

CONNECTICUT RIVER BASIN  
OTTAUQUECHEE RIVER WATERSHED

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September 1996

DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS  
NEW ENGLAND DIVISION  
WALTHAM, MASSACHUSETTS 02254

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## **GENERAL**

### **1-1 Introduction**

This Solid Waste Management Plan includes, hazardous waste, petroleum, oil, and lubricants, and recycling strategies for the North Hartland Lake Flood Control Project located in the towns of Hartland and Hartford, Vermont.

### **1-2 Purpose**

This plan provides guidance to establish policies, responsibilities, procedures, and instructions for proper handling, storage, disposal and recycling of all solid waste generated at the project. Solid wastes include petroleum, oil and lubricants (POLs), hazardous waste, paper, beverage containers, woody debris, and miscellaneous wastes.

The plan was developed from a literature search and review of federal, state, and local requirements and existing and anticipated waste streams. This plan is not a complete treatise on environmental laws and regulations. It is a list of solid waste regulations, policies, and references that may apply to the flood control project and a collection of codifications pertaining to existing and enhanced procedures for solid waste management.

### **1-3 Flood Control Project Description**

The North Hartland Lake flood control project is located in east-central Vermont on the Ottauquechee River in the towns of Hartland and Hartford in Windsor County, Vermont. (See Figure 1.) The project built and operated by the Corps of Engineers is used for flood control, natural resource management, and recreation. North Hartland Lake is one of 16 flood control projects constructed by the Corps in the Connecticut River Basin. The project provides protection for downstream communities as well as allow for reduction of the Connecticut River flood stages in Massachusetts and Connecticut.

There are two non-federal hydropower facilities located at the project: the North Hartland Hydropower Project and the Dewy Mills Hydroelectric Power Generation Station.

The North Hartland Hydropower Project is a 4,000 kW hydropower facility located about 500 feet downstream of the dam. This project is owned and operated by Vermont Electric Cooperative, Inc.<sup>1</sup> The recreational pool head at North Hartland Lake is used for power generation. The dam outlet conduit has been modified to allow discharge to the powerhouse. A set of override controls is installed at the dam to allow the project manager to disrupt generating activity and to operate the reservoir for flood control only, if necessary.

The Dewey Mills Hydroelectric Power Generation Station is located upstream of the Corps dam, above Quechee Gorge, at Dewey Mills dam. The operational mode is run of river and the installed capacity is 1,840 kW. This project is operated by Hydro Energies Corporation.

The Corps project consists of a rolled earth filled dam and dike, side channel spillway, outlet works, and facilities for recreational purposes. The dam is 1,640 feet long and has a maximum height of 185 feet. The top width of the dam is 24 feet. An L-shaped spillway built in rock is located at the north end of the dam abutment. The crest length is 465 feet and the crest elevation is 546.5 feet NGVD. The dam has the capacity to store 71,00 acre-feet of water during flood control operations.

The dam outlet works consist of a 743 foot long tunnel under the dam (concrete horse-shoe conduit 12 feet in diameter), control gates, control tower and operating house on the upstream side of the dam. There is a log boom located upstream of the dam to catch any woody and other debris which might foul the outlet works.

The dike is rolled earth and rockfill with a maximum height of 52 feet and 2,110 feet in length. The dike is located about one half mile south of the dam and is used for closure of a low area in the reservoir area. The dike also contains a 36-inch wide tunnel (a 476 foot-long gated concrete circular conduit under the dike).

This pool provides for recreation and natural resource purposes and provides adequate

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<sup>1</sup> According the Corps project manager, Vermont Electric Generating is currently out of business due to financial difficulties. (Personnel Communication, Mark Rosenthal, June 13, 1996.)

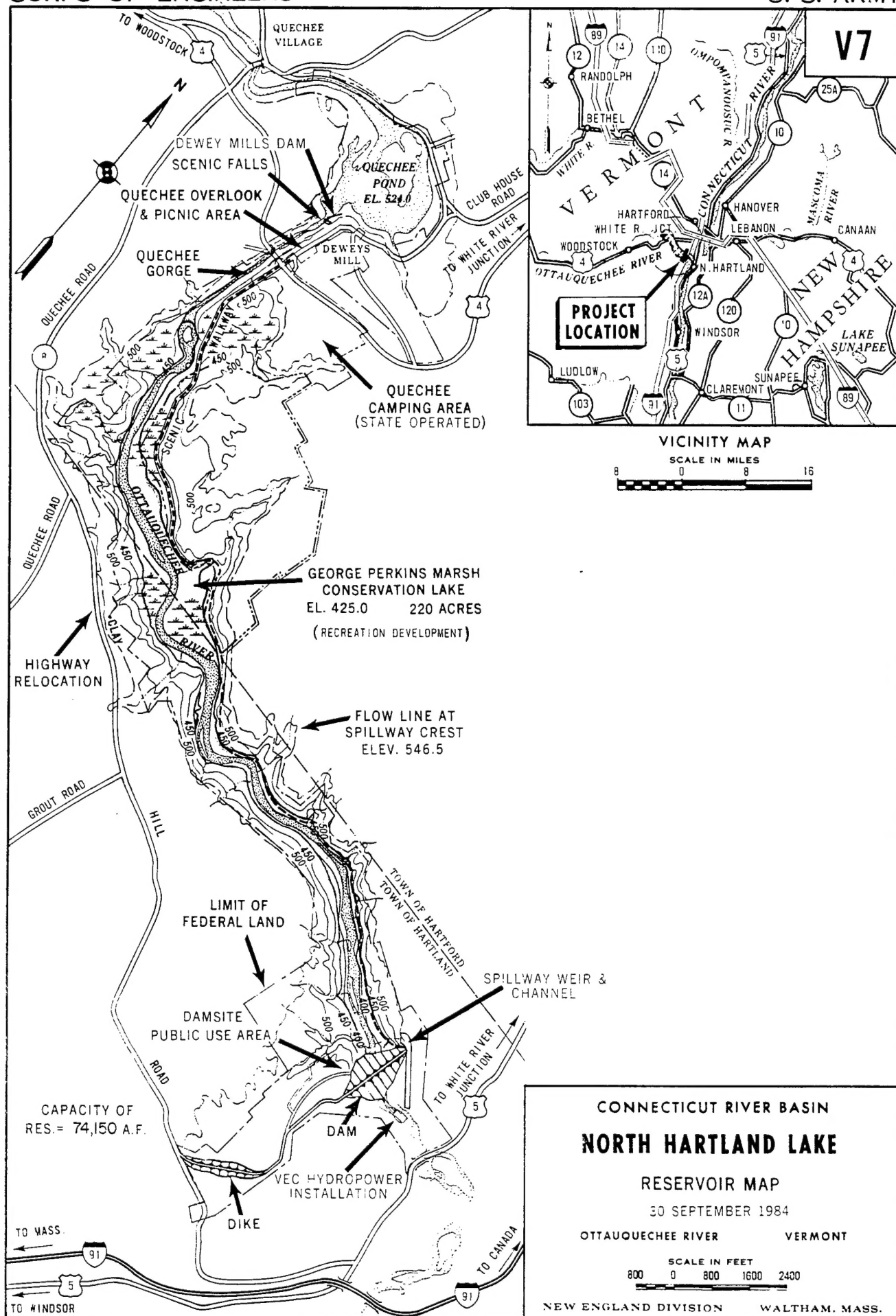


FIGURE 1

head and discharge for hydropower generation.

At present, the recreational area on project lands consist of a picnic area, camping area, ( currently leased to the State of Vermont), boat ramp, and comfort station. North Hartland Lake provides a variety of recreation opportunities. Water-based activities include boating (power and non-power boats), fishing, and swimming. Land-based activities include picnicking, ball playing, cross-country skiing, hiking, mountain bike riding, snow mobiling, hunting, and trapping.

#### **1-4 Overview of Solid Waste Generation<sup>2</sup>**

Facilities at the project that are potential waste generators or waste storage areas include the project office, several storage buildings, vehicles, control building (gate house) at the dam, log boom, recreation areas (swimming beach/picnic area and boat launch) and project lands where there can be illegal dumping of trash.

In general, solid waste generated at the project is carried out under the provisions of maintenance and disposal contract with a local hauler. There are no active on-site landfills. The burial of solid waste is not permitted. Some yard waste and woody debris from the log boom is burned on site<sup>3</sup>. Non-hazardous recyclable materials are brought to the local recycling center by project staff. A carry in/carry out policy has been implemented at the recreation areas. Consumptive maintenance activities, such as service of project vehicles, are usually conducted off-site by a licensed service station or on-site by a contractor. Minimal hazardous wastes are generated at the project.

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<sup>2</sup> This plan does not cover areas that are leased or licensed to other entities.

<sup>3</sup> When burning at the site, the project manager must comply with state regulations for air pollution, notify the local fire warden, the local fire dispatcher, and the local airport.

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## LAWS, REGULATIONS, and DIRECTIVES

### 2-1 Federal

The following is a list of pertinent Federal Statutes and Regulations, Executive Orders, Department of Defense Directives, Department of the Army Regulations and Corps of Engineer Regulations. This list should be updated periodically as laws and regulations are modified and reviewed by legal counsel, as appropriate, to determine the completeness and applicability of the list.

#### Statutes

Resource Conservation and Recovery Act (RCRA) of 1976, PL 94-580, as amended  
    Subtitle C - Hazardous Waste Management  
    Subtitle D - State or Regional Solid Waste Management Plans

Toxic Substance Control Act (TSCA) of 1976, Public Law 94-469, as amended.

Federal Facilities Compliance Act (FFCA) of 1992, P.L. 102-386.

#### Code of Federal Regulations

U.S. Department of Transportation (DOT) Hazardous Materials Regulations including Registration of Persons Who offer for Transport Hazardous Materials (Title 49 CFR, Part 107) Hazardous Materials Table, Special Provisions, Hazardous Materials Communications, Emergency Response Information, and Training Requirements (Title 49 CFR, Part 172, 173) Segregation and Separation Chart of Hazardous Materials (Title 49 CFR, Part 177), and Packaging Standards (Title 49 CFR, Part 178).

U.S. Environmental Protection Agency (EPA) Protection of the Environment, Hazardous Waste Management Regulations (Title 40 CFR, 260-266).

U.S. Environmental Protection Agency (EPA) Protection of the Environment, Solid Waste Management Regulations (Title 40 CFR, 240-258).

### Department of Defense Directives

DoD 4160.21-M, Defense Utilization and Disposal Manual, September 1982, as amended.

DoD Directive Number 4165.60, Solid Waste Management, dated 4 Oct 74.

### Department of the Army Regulations

AR 200-1, Environmental Protection and Enhancement, 23 April 1990, Chapter 5 (Hazardous Material Management Program) and Chapter 6 (Solid Waste and Hazardous Waste Management Program).<sup>4</sup>

AR 420-47, Solid and Hazardous Waste Management, 1 December 1984.

### Executive Orders

Executive Order 12088, Federal Compliance with Pollution Standards

Executive Order 12780, Federal Agency Recycling and the Council of Federal Recycling and Procurement Policy, Nov 4, 1991.

Executive Order 12873, Federal Acquisition, Recycling, and Waste Prevention, Oct 22, 1993.

Executive Order 12843, Procurement Requirements and Policies for Federal Agencies for Ozone Depleting Substances, April 21, 1993.

Executive Order 12856, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements, August 3, 1993.

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<sup>4</sup> Army Regulation 200-1. Applicability. This regulation does not apply to those civil works activities under the jurisdiction of the Secretary of the Army and implemented by the U. S. Army Corps of Engineers. However, it is anticipated that in the future a Corps Engineering Regulation similar to this regulation will be published.



Executive Order 12902, Energy Efficiency and Water Conservation at Federal Facilities, March 8, 1994.

#### Memoranda

Memorandum, CECC-ZA, dated 30 October 1992, Subject: Federal Facilities Compliance Act (FFCA).

Memorandum, CECW-OA, dated 24 Nov 1992, Subject: USACE Facilities Environmental Compliance Letter No. 1, Solid Waste Recycling.

Memorandum, CECW-OA, dated 25 August 1993, Subject: Hazardous Waste Manifest Policy and Procedures.

Memorandum, CEMP-CP, dated 4 May 1995, Subject: Hazardous Waste Manifest Signature Policy and Procedures.

Memorandum, CECW-OA, dated 22 February 1995, USACE Facilities Environmental Compliance Guidance Letter No. 2, Federal Facilities Compliance Act (FFCA) of 1992, Fines and Penalties at Civil Works Funded Projects, Facilities and Activities.

#### Reports

USACERL Special Report - EC 95/05, dated Nov 94, titled "Environmental Assessment and Management Team Guide" (ERGO)

USACERL Special Report - EC 95/07, dated Nov 94, titled "Environmental Review Guide for Operations" (ERGO), "Supplement for the Environmental Assessment and Management Team Guide".

## **2-2 State of Vermont**

The Federal government sets minimum national standards for solid waste disposal. The State of Vermont may impose more stringent measures and procedures than the federal regulations. The following is a list of pertinent state of Vermont Statutes, Regulations, and Reports.

### General Laws

Vermont Statutes, Title 10, Conservation and Development, Chapter 159, Waste Management

### Vermont Regulations

Vermont Hazardous Waste Management Regulations (VHWMR), Subchapter 1 through Subchapter 9.

## **2-3 Local**

In Vermont, the local towns or waste management districts are responsible for implementing local ordinances to regulate the separation, recovery, collection, removal, storage and disposition of recyclables. Both the town of Hartland and Hartford, Vermont, have solid waste management ordinances. These are included in Appendix A. These ordinances are similar and requires business, institution, and industries located within the towns to separate recyclables from all other solid waste. These recyclables should then be recycled in an appropriate manner as specified in the ordinances.

## **2-4 Applicability**

Federal Facilities Compliance Act of 1992. (P.L.- 102-386) This act provides for a waiver of sovereign immunity with respect to federal, state, and local procedural and substantive requirements relating to RCRA solid and hazardous waste laws and regulations. Additionally in its passage of the Act, Congress clearly intended to subject Federal facilities to penalties and fines arising from violation of these laws.

Federal Recycling Requirements. (40 CFR 246.200-1 and 246.202-1, DoD 4165.60, Executive Order 12873, CECW-OA-memorandum-24-November-92.) According to direction provided in these regulations, Corps facilities are required to participate in any state or local recycling program and reduce the volume of waste materials at the source whenever practical. Facilities with over 100 office workers are required to recover high grade paper. Agencies are also required to set goals for increasing the procurement of recycled and environmentally preferable products.

Vermont Regulations. RCRA, like most federal environmental legislation, encourages states to develop and run their own solid waste program. The state program must be as least as stringent as the EPA program. Vermont has been authorized by EPA to run their own solid waste program.

The state solid waste management laws are contained in Vermont Statutes, Title 10, Conservation and Development, Chapter 159, Waste Management. In general, Section 6621 of Chapter 159 prohibits disposal of lead acid batteries, waste oil, white metal goods, tires, paint, or nickel cadmium batteries in solid waste landfills. Also according to Section 6621b, a person may not place into a mixed municipal solid waste a dry cell battery containing mercuric oxide electrode, silver oxide electrode, nickel-cadmium, or sealed lead acid that was purchased for use by a government agency, or an industrial, communications, or medical facility.

The Vermont Hazardous Waste Regulations are contained in Vermont Hazardous Waste Management Regulations (VHWMR), Subchapter 1 through Subchapter 9. Generators of hazardous waste are required to comply with VHWMR and are subject to unannounced inspections by state inspectors.

## **2-5 Suggested Policy Guidelines**

Suggested policy guidelines for management of solid wastes including POLs, waste liquid and hazardous waste are as follows:

- a. The quantity of solid waste should be reduced at the source whenever possible.
- b. Appropriate components of the waste stream should be recycled or composted to the fullest extent possible.
- c. Non-hazardous and non-toxic materials should be substituted for hazardous and toxic materials used in facility and activity operations and procedures, when practicable.
- d. Waste should be handled, stored, and disposed of in a manner which protects the health and welfare of all persons.
- e. Storage and disposal of POLs should be carried out by the method(s) most advantageous to the government, in compliance with Federal, state, local, DoD and Army requirements.
- f. Hazardous waste should be safely controlled, accounted for with an audit trail and chain of custody, and handled in accordance with legal requirements.
- g. This project should not establish or maintain a landfill.
- h. To the extent possible, environmentally friendly products and products made from recycled materials should be purchased for use at the project.

## WASTE DEFINITIONS <sup>5</sup>

### 3-1 Solid Waste

Solid waste includes garbage, refuse, and sludge as well as any solid, semi-solid, liquid, or contained gaseous material that is discarded. A discarded material is one that has been determined to be an inherently waste-like material by the EPA Administrator. Under certain circumstances, recycled materials are considered discarded materials (and therefore solid wastes) if they are used in a manner constituting disposal, burned for energy recovery, reclaimed, or accumulated speculatively. Certain wastes have been excluded for the definition of solid waste: domestic sewage; point-source discharges regulated under the Clean Water Act (CWA); irrigation return flows; source, special nuclear, or by-product material regulated under the Atomic Energy Act; *in situ* mining waste; pulping liquors that are reclaimed; spent sulfuric acid used to produce virgin sulfuric acid; and secondary materials reclaimed and returned to the original generation process for reuse. The regulatory definition of solid waste may be found in 40 CFR 261.2.

### 3-2 Hazardous Waste

The Resource Conservation and Recovery Act (RCRA) was passed by Congress in 1976 to address the problem of how to safely manage and dispose of municipal and industrial waste generated nationwide. RCRA creates a framework for the proper management of hazardous and non-hazardous waste. Federal regulations only set a baseline standard with which everyone involved with hazardous wastes must comply. Frequently states choose to adopt more stringent regulations than federal regulations.

RCRA addresses the "cradle to grave" management of hazardous waste. This includes the generation, storage, treatment, transportation and disposal of hazardous wastes. RCRA defines hazardous waste as a solid waste (including liquids and gases), or a combination of

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<sup>5</sup> Some of the wording in this section was adapted from a publication prepared by ENSR Consulting and Engineering, Acton, Massachusetts, entitled "A guide to Permitting, Compliance, Closure, and Corrective Action Under the Resource and Conservation Recovery Act", dated October 1990.

solid wastes which may, because of its quantity, concentration, or physical, chemical or infectious characteristics:

- o cause or significantly contribute to an increase in mortality or in serious irreversible, or incapacitating illness; or
- o pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Certain types of solid waste are excluded from regulation as hazardous waste. These include:

- o household waste;
- o solid wastes generated by growing crops or raising animals, and which are returned to the soil as fertilizers;
- o mining overburden returned to the mine site;
- o ash waste produced from the combustion of fossil fuels;
- o wastes from oil, gas, and geothermal exploration, development, or production;
- o certain wastes failing the toxicity characteristic test including discarded wood or wood products, and petroleum-contaminated media or debris;
- o specific wastes from the extraction, beneficiation, and processing of ores and minerals; and
- o cement kiln dust waste.

See 40 CFR 261.4 for the complete listing of exclusions.

Listed versus Characteristic Hazardous Wastes. Under the current federal regulatory framework, a solid waste is considered a hazardous waste (and therefore subject to requirements of RCRA) if it is either a "listed" waste under 40 CFR Part 261 Subpart D, or a "characteristic" waste under 40 CFR part 261 Subpart C.

A waste is a listed waste if it comes from a process that was found to generate a "hazardous" waste (non-specific source wastes and specific source wastes), or if the waste is a commercial chemical product that has been discarded. Non-specific source wastes are generic wastes commonly produced by manufacturing and industrial processes and specific source wastes consist of wastes from identified industries such as wood preserving, petroleum refining, and organic chemical manufacturing. Commercial chemical products include such items as acetone, creosote, dichlorodiphenyltrichlorethane (DDT) methanol, and toluene. (Refer to 40 CFR Subpart D, Section 261.30-261.33 for listed wastes.)

A characteristic waste exhibits any one or more of the following characteristics: ignitability, corrosivity, reactivity, or toxicity. The definitions of these characteristics is included in 40 CFR 261.20-261.24.

Special Wastes. Non-hazardous solid waste requires handling other than normally used (see 40 CFR 240.101). Special wastes are waste streams that do not come under RCRA, but may come under state hazardous waste requirements or under the Toxic Substance Control Act. States may choose to include items in their state hazardous waste regulations which are not considered hazardous wastes under RCRA.

State Identification and Listing of Hazardous Wastes. The Vermont Hazardous Waste Regulations provides an identification and listing of Hazardous Wastes in Vermont. ( See Subchapter 2: Identification and Listing of Hazardous Waste.) Although these are similar to the RCRA requirements, Vermont has included additional listings not found in RCRA.

### 3-3 Non-Hazardous Waste

For purposes of this plan, non-hazardous wastes are those that are not considered hazardous under federal or state regulation. This would include such items as paper, cardboard, beverage containers, scrap metal (free of any residues) and woody debris.

### 3-4 Classification of Hazardous Waste Generators

Federal Definitions. The first step in the waste cycle is the generator. Under RCRA regulations, generators must determine if their waste is hazardous and must oversee the management and ultimate fate of the waste. RCRA identifies three different categories of hazardous waste generators. The generator definition is important because applicable waste management regulations vary for each type of generator. These categories are conditionally exempt small quantity generator (CESQG), small quantity generator (SQG), large quantity generator (LQG). For general information, a summary of key RCRA criteria for CESQGs [40 CFR 261.5] and SQGs [40 CFR 262] are:

	<u>Hazardous Waste Generation</u> amount/month	<u>Accumulation of Hazardous Waste</u> maximum amount
CESQG	max. 100 kg (220 lbs)(~26 gal.)	1,000 kg (2,200 lbs)(~260 gal.)
SQG	max. 1,000 kg (2,200lbs)(~260 gal.)	6,000 kg (13,200 lbs)(~1,560 gal.)
	<u>Acute Hazardous Waste Generation</u> amount/month	<u>Acute Hazardous Waste Generation</u> maximum amount
CESQG	max. 1 kg (2.2 lbs)(1 quart)	max. 1 kg (2.2 lbs)(1 quart)
SQG	max. 1 kg (2.2 lbs)(1 quart)	max. 1 kg (2.2 lbs)(1 quart)
	<u>Material from Cleanup of a Spill of</u> <u>Acute Hazardous Wastes</u> amount/month	<u>Material from Cleanup of a Spill of</u> <u>Acute Hazardous Wastes</u> maximum amount
CESQG	max. 100kg. (220 lbs)(~26 gal)	max. 100kg. (220 lbs)(~26 gal)
SQG	max. 100kg. (220 lbs)(~26 gal)	max. 100kg. (220 lbs)(~26 gal)

LQG criteria can be found in 40 CFR 262.



**State Definitions.** State of Vermont Hazardous Waste Management Regulations define two types of generators, a Conditionally Exempt Small Quantity Generator (CESQG) and a "Generator". The definition for a Vermont CESQG is similar to the RCRA definition described above. All other hazardous waste generators are considered "Generators". For general information, a summary of key state criteria for CESQGs [VHWMR 7-303] are:

<u>Hazardous Waste Generation</u> amount/month		<u>Accumulation of Hazardous Waste</u> accumulate less than the following at any time
CESQG	less than 100 kg (220 lbs)	1,000 kg (2,200 lbs)
<u>Acute Hazardous Waste Generation</u> amount/month		<u>Acute Hazardous Waste Generation</u> accumulate less than the following at any time
CESQG	less than 1 kg (2.2 lbs)	1 kg (2.2 lbs)
<u>Material from Cleanup of a Spill of Acute Hazardous Wastes</u> amount/month		<u>Material from Cleanup of a Spill of Acute Hazardous Wastes</u> accumulate less than the following at any time
CESQG	less than 100kg. (220 lbs)	100kg. (220 lbs)

If any person generates or accumulates hazardous waste in amounts exceeding the limits specified above, then that person is considered a "Generator" and is subject to full regulation under the State's hazardous waste regulations. [VHWMR 7-303 (5)]

EPA Identification Number. Each project has been assigned an EPA federal facility identification number for reporting purposes. (See Appendix B.) These numbers were assigned to the projects in 1981. At that time the projects were identified as SQGs (federal generator definition). These numbers were issued by EPA to the Corps prior to the federal Facilities Compliance Act, which was promulgated in 1992. Since the Federal facilities Compliance Act, the federal projects in New Hampshire are also required to meet the Vermont requirements relating to hazardous waste laws and regulations.

Generator Category. Each project should be tracking and documenting on an annual basis the amount of hazardous waste generated per month at the facility. This data can be used to determine what type of generator you are. If your generator category changes or if other information regarding your facility requires updating, you should notify EPA and the state of these changes. Any actions to modify your generator status or facility information should be approved through NED channels.

Rules on Storing and Disposal of Hazardous Wastes. The project manager should ensure that he is in compliance with both state and federal requirements for hazardous waste generators. In general, these requirements include properly storing and labeling hazardous waste, not exceeding accumulation time criteria, and using the manifest system to ensure that waste is sent by a licensed hauler to an EPA and State approved disposal facility, meeting record keeping and reporting regulations, and providing training to staff.

A comparison of RCRA generator requirements are included in the Environmental Assessment and Management (Team) Guide EC-95/05, page 4-3 and are detailed in the Code of Federal Regulations Title 40, Parts 260-266. Vermont generator requirements are detailed in the Vermont Hazardous Waste Management Regulations. Also for informational purposes, the "Hazardous Waste Generator Handbook" prepared by the Vermont Department of Environmental Conservation, Hazardous Materials Management Division, dated May 1994, is included as Appendix C.

For informational purposes the RCRA and State generator requirements are summarized on the following pages. For specific information regarding the generator requirements the project manager should refer to the federal and state regulations.

**Comparison of RCRA - CESQG and SQG Generator Requirements (Source: EC/95/05)<sup>6</sup>**

<u>Requirement</u>	<u>CESQG</u>	<u>SQG</u>
Identify Hazardous Waste	yes	yes
Facility Receiving Waste	State approved or RCRA permitted	RCRA permitted
EPA ID Number	Not Required	Required
RCRA personnel Training	Not Required	Required
DOT Training	Required	Required
Exception Report	Not Required	Required > 60 days
Biennial Report	Not Required	Not Required
Accumulation Time Limits	None	180 days
Use Manifests	No <sup>7</sup>	Yes
Storage Requirements	None	Comply with regulations

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<sup>6</sup> For LQG requirements see EC/95/05 or CFR Title 40, Parts 260-266.

<sup>7</sup> It is NED policy that all hazardous waste be manifested regardless of the generator status.

**Comparison of State of Vermont - CESQG and "Generator" Requirements (Source: Summary prepared from Vermont Hazardous Waste Management Regulations. For full listing of generator requirements see VHWMR, Sections 7-301 to 7-310)**

<u>Requirement</u>	<u>CESQG</u>	<u>"Generator"</u>
Identify Hazardous Waste	yes	yes
EPA ID Number	Required	Required
Facility Receiving Waste	State authorized and RCRA approved	RCRA permitted
Notification of Hazardous Waste Activity Form to Vermont Agency of Natural Resources	yes	yes
Personnel Training	Not Required	Required
DOT Training	Required	Required
Annual Report	Maybe Required	Required
Accumulation Time Limits	Not Required	90 days (See Section 7-308 for details and extensions.)
Inventory and Inspection	Not Required	Daily log
Emergency Equipment	Not Required	Required
Contingency Plan	Not Required	Required
Use Manifests	No <sup>8</sup>	Yes
Follow regulations for containers, tanks, and storage areas	Some Requirements	Required

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<sup>8</sup> It is NED policy that all hazardous waste be manifested regardless of generator status.

## MANAGEMENT OF WASTE STREAMS

### 4-1 General Solid Waste Management Options

The following is a list of possible solid waste management options.

- a. Purchase and use recycled products.<sup>9</sup>
- b. Reduce the amount of waste generated.<sup>10</sup>
- c. Sort, recycle, and compost appropriate components of the waste stream.
- d. Combust, with energy recovery, the balance of waste that cannot be reduced or recycled.<sup>11</sup>
- e. Landfill wastes that cannot be reasonably be recycled or combusted.

Off-site solid waste management which may be available include recycling and composting facilities, waste processors, solid waste combustion facilities and landfills. The variety of available disposal options should be fully considered in the management of project wastes.

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<sup>9</sup> Executive Order 12873 requires Federal agencies to procure products that are environmentally preferable or made with recycled materials. Corps guidance regarding this executive order has not yet been developed.

<sup>10</sup> The project Pollution Prevention Plan provides target waste reduction goals.

<sup>11</sup> This management option is not available on-site at the project.

## 4-2 Solid Waste Generators

There are several different potential waste generation locations at North Hartland Lake. The following is a list of these sites. General management of these materials is discussed in Chapters 4 and 5.

Project Office. Generates high grade office paper, other recyclable paper (e. g. newspaper), containers (plastic, glass, aluminum), fluorescent lights and light ballasts, household batteries, cardboard and miscellaneous refuse.

Paint Locker in the Project Office. The specialized storage room stores the paint, oil, automobile batteries and hazardous materials.

Petroleum Product Storage Tanks. The location of these tanks are described in the North Hartland Lake Spill Prevention, Control, and Counter Measure and Contingency Plan, dated August 1995.

Storage Buildings. Stores rock salt, signs, small hand equipment, heavy equipment such as tractors and boats, etc....

Control Building at Dam (Gatehouse). Uses fuel oil for the heating unit and hydraulic fluid for the flood control gates.

Log Boom. Captures woody and other debris from flooding events (for example: tires, 50-gal. drums, other miscellaneous refuse).

Picnic Areas/Swimming Beaches/Boat Launch. In order to minimize waste generation at the recreation areas, a carry in/carry out policy has been implemented. At the entrance to the recreation areas visitors are informed of this policy and provided with a garbage bag in which to collect their refuse and carry it away when they leave.

Public Rest Rooms. Public rest rooms are located at the Project Office and at the recreation area. Paper hand towels are provided and disposed of in trash cans in the rest rooms.

Rain Gage. A biodegradable antifreeze is used in the rain gage.

Project lands. Generates trash illegally dumped at project by the public - old tires, yard waste, aluminum cans etc. (Corps access roads are gated and closed during non-recreation times and help to prevent illegal dumping of trash on project lands. However, access may occur through land abutting Corps property that is not fenced or gated.)

Renovation/Construction at Project. May generate asphalt and building construction debris.

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## **MANAGEMENT OF HAZARDOUS WASTE**

### **5-1 General Requirements**

The following is a general outline of hazardous waste management requirements. The project manager should refer to the Vermont Hazardous Waste Management Regulations (VHWMR) for detailed information. Where the hazardous waste generating activity is carried out by a Corps contractor, the contractor will be required to follow all applicable state, local and federal regulations.

A separate collection, packaging and storage system should be established, so that all wastes are properly segregated, identified and labeled to facilitate disposal through a licensed contractor.

The use of materials which generate hazardous waste should be minimized. Hazardous materials should be purchased in minimal quantities for completion of the task at hand.

The hazardous waste should be stored in a container made of or lined with materials which will not react with, and are otherwise compatible with, the hazardous waste to be stored in the container. Containers must be Department of Transportation approved for highway transportation.

The hazardous waste storage area must meet the requirement of state and federal hazardous waste regulations. In general the area must be identified by the appropriate signs. The storage area floor must be impermeable, safety and emergency equipment must be available, and there must be adequate aisle space.

Throughout the period of storage or treatment, each container shall be clearly marked and labelled in a manner which identifies the date accumulation began, the hazardous waste(s) being stored or treated in the container, and the hazard(s) associated with the hazardous waste (e.g., ignitable, toxic, dangerous when wet). Each container shall also be marked clearly with the words "Hazardous Waste". Vermont hazardous waste storage requirements are

detailed in VHWMR Subchapter 3. The period of storage should not exceed that allowed by Vermont regulation.

The generating activity is responsible for preparation of containers and documentation for disposal and should comply with Department of Transportation Regulations for transport of hazardous materials. Containers must be accompanied by proper documentation and any other information required by the contractor, such as Material Safety Data Sheets (MSDSs), laboratory analysis results, or waste profile data.

Hazardous waste should be disposed of through a licensed hauler and sent to a licensed facility. A hazardous waste manifest will accompany any materials and appropriate record keeping will be utilized. Only those persons formally designated and authorized by the Division Commander are authorized to execute hazardous waste manifests and related documents.<sup>12</sup> The formal designation and authorization must be in writing and state the employee is within their scope of employment when executing such documents. Records of the authorization should be kept on file. DOT manifest training must be current. Expiration of training (2 years) will void formal designation authority. (See Appendix D)

It is suggested that all records regarding Hazardous Wastes be maintained at the project office for a minimum of 3 years. (The 3 year time frame is specified in the VHWMR, Section 7-804, Record Keeping.)

Daily inspection during regular business days of the storage area must be conducted to ensure the containers are in good condition. Inspections are to be documented in a log book. (See VHWMR, 7-309 (1), Inventory and Inspection.) An inventory of hazardous waste in the storage area must be kept at a location apart from the storage area. This is necessary so that in the event of an emergency a record of stored hazardous waste is available.

Specific Petroleum, Oil, and Lubricant requirements are included in the Spill Prevention, Control and Countermeasures Plan (SPCCP), and Spill Contingency Plan for North Hartland Lake dated, August 1995.

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<sup>12</sup> At the North Hartland Lake project Ms. Roxanne Barbeau is designated to sign hazardous waste manifests.

Infectious wastes (medical) are regulated as a Hazardous waste under Vermont Regulations. (See VHWMR, 7-210, Vermont Listed Wastes.) No medical wastes are generated at the project site. However, if such wastes are illegally dumped at the project site, they should not be disposed of by project staff. The area where the waste is located should be secured and posted as to the hazard. The Local Board of Health and the Vermont Emergency Management Hotline (800) 424-8802 should be immediately notified to determine the appropriate course of action. The Division Safety Officer should also be notified regarding any medical wastes found on project lands.

## **5-2 Specific Suggestions for Disposal of Hazardous Waste.**

Waste Oil. Under RCRA, if used oil is considered a hazardous waste, it is subject to all hazardous waste regulations. Criteria to consider when determining if your waste oil is a hazardous waste are: has it been mixed with a listed hazardous waste or characteristic hazardous waste; does it contain more than 1000 ppm total halogens; or does it have a hazardous waste characteristic. If it is not considered a hazardous waste then it must be managed in accordance with federal regulations for standards for management of waste oil. These are included in 40 CFR part 279.

In Vermont, waste oil is not regulated as a hazardous waste provided that (VHWMR 7-203(14):

(1a) it does not exhibit a hazardous waste characteristic;

(1b) it is stored in such a way that no leakage occurs and;

(1c) it is offered to a certified hazardous waste hauler for transport to a facility, marketer or collector where the waste oil is burned for energy recovery.

(2) If the waste oils exhibit one or more hazardous waste characteristics and is recycled in some other way than burning for energy recovery.

Used Oil Filters. Under the federal hazardous waste regulations, used oil filters may be considered a hazardous waste. There is an exemption from hazardous waste requirements

if all the oil is removed from the filter and if the filter is not lead plated.

Vermont also exempts used oil filters from hazardous waste requirements if the filter does not exhibit a characteristic of a hazardous waste and the filters are drained for at least 4 hours, or crushed and drained, and all drained oils are collected and managed subject to the used oil regulations.

In general all flood control project automobiles and heavy equipment are maintained off-site by service station or on-site by a contractor. However, if there are any used oil filters generated at the project, they should be handled in manner consistent with federal and state regulations.

Cleaning Solvent. Project staff reported that an organic based non-hazardous cleaning solvent is used at the site. Be aware that many degreasing solvents when disposed of are hazardous wastes.

Lead Acid Batteries. Vermont requires that lead-acid batteries be recycled where possible. Requirements for reclaimed lead-acid batteries are outlined in VHWMR 7-612.

(1) Any generator, dealer, or collector who stores spent lead-acid batteries shall store the batteries under cover on an impervious surface;

(2) Transport of spent acid batteries shall be in compliance with 49 CFR parts 171 through 177;

(3) Owners or operators of facilities which store lead-acid batteries before reclaiming them are subject to requirements of 40 CFR Part 266, Subpart G.

When not possible to recycle, for example if batteries are damaged or not in condition for acceptance by the recycler, they are to be disposed of as hazardous waste. Disposal in landfills is prohibited.

Other Batteries. Eight metals are commonly used in batteries: mercury, cadmium, lead, zinc, manganese, nickel, silver, and lithium. Batteries should not be disposed of as miscellaneous refuse.

In Vermont rechargeable batteries can be brought back to the manufacturer for regeneration. Some non-rechargeable batteries (sometimes referred to as household batteries) may be sent to a recycling facility. When sent to be recycled the procedures to follow for storage and shipping are outlined in the EPA Standards for Universal Waste Management [40 CFR 273]. Spent batteries that can not be recycled should be handled as hazardous waste. Be aware that some of the newly manufactured batteries may be below toxicity levels for hazardous wastes.

Antifreeze. A determination should be made as to whether or not any waste antifreeze generated at the project is considered a hazardous waste. If it is, the storage and disposal must comply with all state and federal hazardous waste regulations. In general, all vehicle maintenance is done off-site by a service garage or on-site by a contractor.

Surplus Paint and Allied Products. These may include oil-based paint, paint thinners, turpentine, varnishes, shellacs or polyurethane. Purchase of these products should be on an as needed basis. Any residues should be stored and disposed of in accordance with state and federal hazardous waste regulations.

Pesticides/Herbicides. Careful selection, inventory and control of materials will help to reduce or eliminate their disposal. Any residues should be stored and disposed of in accordance with state and federal hazardous waste regulations. At the project all of the herbicide activities are carried out by a contractor. All contractors are required to be state licensed and to comply with applicable state and federal regulations. Project staff reported that no pesticides are used at the project.

Treated Wood. Some wood is chemically treated to enhance its resistance to rot and insect damage. Treatment extends use from 3-5 years to 20-50 years or longer. The four most common mediums to treat wood are creosote, inorganic arsenical, pentachlorophenol (PC), and Copper Napthenate. Treated wood is not a "listed" hazardous waste under Federal Regulations. However, it is subject to the Toxicity Characteristics Leaching Procedure (TCLP) to determine if the wood is a "characteristic" hazardous waste (40 CFR 261.24).

If the treated wood is determined to be a hazardous waste it should be stored and disposed of in accordance with state and federal regulations.

Fluorescent Lights and Ballasts. These items are known to contain hazardous materials. They should not be disposed of as miscellaneous refuse. Light ballasts may contain polychlorinated biphenyls (PCBs) and fluorescent lamps contain varying levels of mercury.

Regarding ballasts, Vermont's "listed" hazardous waste includes waste containing PCB in concentrations equal or greater than 50 ppm. Federally these same PCB wastes are regulated under the TSCA regulations. You must determine if the ballasts contain PCB and if so comply with both sets of regulations.

Regarding spent fluorescent lamps, those which exceed the limits established by the TCLP test are considered to be hazardous waste and subject to Vermont Hazardous Waste Rules. If the lamps are not broken, they can be sent to a recycling facility.

Empty Containers. The federal regulations regarding residues of Hazardous Wastes is based on the definition of "empty". If the container is "empty", then the container is not subject to the hazardous waste regulations. However, a container is only considered empty if it meets the criteria in 40 CFR 661.7. This criteria is summarized below. The Vermont definition of "empty container" is very similar to the federal definition and is included in VHWMR Section 7-203(10).

(1-i) All waste has been removed that can be using the practices commonly employed to remove materials from that type of container,

(1-ii) and no more than 2.5 centimeters of residue remain at the bottom of the container,

(1-iii) or no more than 3 percent by weight of the total capacity of the container remains in the container if the container is less than 110 gallons in size and no more than 0.3 percent by weight of the total capacity if the container is greater than 110 gallons in size.

(2) A compressed gas container that held a hazardous waste is empty when the pressure in the container approaches atmospheric.

(3) If the container has held an acute hazardous waste then the container must be cleaned by triple rinsing, using a solvent capable of removing the product; or the container must be cleaned by another method that has been shown in the scientific literature to achieve equivalent removal.

## MANAGEMENT OF NON-HAZARDOUS WASTE

### 6-1 General Requirements

Recreational Waste Collection. Covered waste containers are not provided at public use areas. It is the responsibility of the visitor to the project to remove any waste they generate from the site and dispose of it properly. A Carry In/Carry Out policy has been implemented at the recreation area. Visitors are provided with a garbage bag when they enter the park.

Miscellaneous Waste Collection. There is one dumpster located at the project, a 3-yard dumpster near the project office. The dumpster is emptied on a monthly/bi-monthly basis by a licensed disposal contractor. The dumpster should not be used for recyclable materials.

### 6-2 Recyclable Waste

Beverage Containers (glass and plastic bottles, aluminum cans). These items should be recycled. (See the "Markets and Special Services Directory for Reusable and Recyclable Materials, dated February 1996, included in Appendix E.)

High Grade Office Paper/Newspapers/Cardboard/Mixed Paper. High grade office paper is recyclable and should be collected in separate containers for recycling. Cardboard and newspaper may also be recycled. (See the "Markets and Special Services Directory for Reusable and Recyclable Materials, dated February 1996, included in Appendix E.)

Scrap Metal. Scrap metal should also be recycled. (See the "Markets and Special Services Directory for Reusable and Recyclable Materials, dated February 1996, included in Appendix E.)

Laser Toner Cartridges and Printer Ribbons. These items can be recycled. (See the "Markets and Special Services Directory for Reusable and Recyclable Materials, dated February 1996, included in Appendix E.)

### **6-3 Compostable Waste**

Leaves/woody debris (yard waste)/woody log boom debris. There is no composting available at the project. Woody, log-boom debris is burned on-site. The project manager is responsible for obtaining the appropriate approvals and permits. Woody debris not burned should be removed by a licensed disposal contractor from the project.

### **6-4 Non-recyclable Wastes**

Miscellaneous Refuse and Non-Recyclable Paper. This waste should be picked up by a licensed disposal contractor from the project.

### **6-5 Difficult to Manage Wastes**

Construction and Demolition(C&D). This waste is debris generated from construction, renovation, repair, and demolition of roads, bridges, and buildings. It includes wood, steel, concrete, masonry, plaster, metal, and asphalt. At the project, the disposal of this material will be the responsibility of the construction contractor for any renovation project. The material should be disposed of at an approved C&D disposal facility.

Tires. Vermont has banned the landfill disposal of tires. Most tire distributors, transfer stations, and garages will accept tires for a fee. (Also see the "Markets and Special Services Directory for Reusable and Recyclable Materials, dated February 1996, included in Appendix E.)

White Metal Goods. White metal goods are household appliances which include refrigerator, water heaters, electric ranges etc.... Vermont has banned white goods from landfill disposal. Most transfer stations and junk yards recycle appliances for a small fee. Beware that refrigerators are likely to contain Chlorofluorocarbons (CFCs). Also, white metal goods have small capacitors which may contain PCB, a hazardous waste in Vermont. (See the "Markets and Special Services Directory for Reusable and Recyclable Materials, dated February 1996, included in Appendix E.)



Ozone Depleting Substances (ODSs). It is the policy of the Corps to minimize the procurement of materials and substances that contribute to the depletion of stratospheric ozone; and give preference to the procurement of alternative chemicals and products that reduce the overall risks to human health and the environment by lessening depletion of ozone in the upper atmosphere. In addition, ODSs "Elimination Plans" are to be developed for each project. A memorandum outlining this policy is included in Appendix F.

Chlorofluorocarbons may be contained in air conditioners, water coolers, dehumidifiers, refrigerators and automobile air conditioners. CFCs are regulated under air pollution regulations. Individuals servicing and disposing of air conditioning and refrigeration equipment are prohibited from knowingly venting refrigerant into the atmosphere. At the flood control project these units are serviced off-site. The service contractor is required to provide documentation indicating that they are certified by EPA to deal with this material. Any new equipment purchased should maximize the use of safe alternatives to these ozone depleting substances.

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## **RESPONSIBILITIES**

### **7-1 The Division Environmental Coordinator**

The Environmental Coordinator is responsible for the following items.

- o Provide technical assistance and guidance to project manager in developing environmentally safe procedures for solid waste management.
- o Provide oversight of required permits and renewals, and EPA hazardous waste generators application numbers.
- o Review and approve Solid Waste Management Plan, revision, and amendments.

### **7-2 The Project Manager<sup>13</sup>**

The Project Manager is responsible for the following items.

- o Program sufficient funds to insure compliance with solid waste management requirements.
- o Maintain a complete and current inventory of stored hazardous materials and hazardous waste at the project.
- o Assure that only those properly trained and designated by the Commander will handle hazardous waste at the project and sign hazardous waste manifests.
- o Monitor facility compliance with hazardous waste manifest procedures and

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<sup>13</sup> Project Environmental Compliance Coordinators (ECCs) are being designated for each river basin. One of their functions will be to support the field management of hazardous wastes.

make recommendations for corrective actions or procedural changes when necessary or advisable.

- o Maintain copies of all relevant regulations, directives, and guidance on hazardous materials, wastes and POLs at the project and keep these materials in an organized, highly visible manner.
- o Arrange for any testing of materials suspected of being hazardous wastes.
- o Inspect storage areas for malfunctions and deterioration, operator errors and discharges which may be causing or leading to the release of waste constituents into the environment or are a threat to human health. Inspections must be conducted to identify potential problems in time to correct them before a problem occurs.
- o Assure reuse of recycled materials when possible and feasible. Appropriate disposal and recycling specifications should be included in purchase requests or contracts.
- o Maintain material safety data sheets in the project office for staff to review.
- o Review this Solid Waste Management Plan and make any necessary revisions to the Plan.

## **TRAINING**

### **8-1 Hazardous Waste Training**

Training is an important component of regulatory compliance. Training should be carried out to ensure that all personnel working in facilities with hazardous wastes are knowledgeable of hazardous waste management requirements, emergency procedures, and spill reporting requirements.

Department of Transportation regulation 49 CFR 172.700 (Subpart H-training) requires the training of employees who load, unload or handle hazardous materials for transportation, assure the safety of the shipment, or operate a motor vehicle used to transport hazardous materials.

Only employees formally designated, trained and authorized by the Division Commander are authorized to execute hazardous waste manifests and related documents. DOT hazardous waste manifest training must be current. The formal designation and authorization must be in writing and state the member is within their scope of employment when executing such documents. Each project unit should have at least one person formally designated and trained for this function.

In addition, Vermont (VHWMR, 7-309(4)) requires all "Generators" of hazardous waste to comply with the following training requirement and documentation:

- o facility personnel must successfully complete a "program" of classroom training that teaches them to perform their duties in a way that ensures the facilities compliance with the VHWMR. The "program" requirements are detailed in the regulation. An annual review of training is also required. In addition the project manager must maintain documents and records of the training and other job and qualification information.

All hazardous waste management training should be coordinated with the Division Environmental Compliance Coordinator and Safety Officer.

## **8-2 Other Training**

Although there is no specific training requirements for non-hazardous solid waste management, the Project Manager is encouraged to provide educational recycling information to employees for their information.

## **GLOSSARY TERMS AND ABBREVIATIONS**

CFR - Code of Federal Regulations

Certification - A statement of professional opinion based upon knowledge and belief.

CFCs - Chlorofluorocarbons

Construction and Demolition Waste (C&D) - Construction and demolition waste (C&D) is debris generated from construction, renovation, repair, and demolition of roads, bridges, and buildings. It includes wood, steel, concrete, masonry, plaster, metal, and asphalt. These wastes have a number of beneficial uses, e.g. crushing asphalt and concrete/brick separately or in conjunction with virgin materials to produce recycled asphalt paving; process gravel, road base, and solid fill. Chipping and grinding wood treated with preservatives produces boiler fuel, a bulking agent for sludge composting; wood fiber, and erosion control for landfills. Untreated wood can be chipped for landscape mulch.

Container - A portable device in which a material or waste is stored, transported, treated, disposed of, or otherwise handled.

CWA - Clean Water Act

Disposal - The discharge, deposit, injection, dumping, spilling, leaking or placing of any solid waste or hazardous waste into or on any land or water so that such waste (or any constituent thereof) may enter the environment or be emitted into the air or discharged into any waters, including ground waters.

DoD - Department of Defense

DOT - The United States Department of Transportation

ECC - Project environmental compliance coordinator

EPA - The United States Environmental Protection Agency

Generator - A person who produces or creates hazardous waste identified or listed under RCRA (relating to criteria, identification, and listing of hazardous waste).

HSWA - Hazardous and Solid Waste Amendments of 1984 (to RCRA)

Hazardous Material - (1) A substance or material which has been determined by the Secretary of the U.S. Department of Transportation to be capable of posing an unreasonable risk to health, safety, and property when transported in commerce, and which has been designated.  
(2) Is listed in 49 CFR, Part 172.101, Hazardous Materials Table.

High Grade Paper - Includes letterhead, dry copy papers, miscellaneous business forms, stationery, typing paper, tablet sheets, and computer paper.

Management - The entire process, or any part, of storage, collection, transportation, treatment, and disposal of hazardous wastes by person engaging in such process.

Manifest - The shipping document EPA Form 8700-22, and if necessary, EPA Form 8700-22A, originated, signed, and distributed in accordance with the instructions supplied with the manifest form and applicable state requirements.

Manifest System - The manifest, instructions supplied with the manifest, and distribution system for copies of the manifest which together identify the origin, routing, and destination of hazardous waste from the point of generation to the point of treatment, storage or disposal.

NGVD - National Geodetic Vertical Datum-MSL of 1929.

OSDs - Ozone depleting substances

POL - Petroleum, oil, and lubricants

RCRA - Resource Conservation and Recovery Act of 1976. (P.L.94-580, as amended)

Resource Recovery - The process of obtaining materials or energy from solid waste.



Source Separation - The separation of recyclable materials at their point of generation by the generator.

Storage - The holding of hazardous waste for a temporary period, at the end of which the hazardous waste is treated, disposed of, or stored elsewhere.

TCLP - Toxicity Characteristics Leaching Procedure

TSCA - Toxic Substance Control Act.

## REFERENCES

ENSR Consulting and Engineering, Acton, Massachusetts. October 1990. "A Guide to Permitting, Compliance, Closure, and Corrective Action Under the Resource and Conservation Recovery Act."

U.S. Army Corps of Engineers, Baltimore District. July 1993. POL Waste Liquid and Hazardous Waste Management Plan for Baltimore District, Project Operations Branch.

U.S. Army Corps of Engineers, New England Division. 1996. Environmental Compliance Assessment of North Hartland Lake, Vermont.

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U.S. Army Corps of Engineers, New England Division. August 1995. Spill Prevention, Control, and Countermeasure Plan and Spill Contingency Plan for North Hartland Lake.

U.S. Army Corps of Engineers, New England Division. Scheduled to be completed September 1996. Pollution Prevention Plan for North Hartland Lake.

**APPENDIX A**  
**TOWN ORDINANCES**

10/24/90

**CHAPTER 10**  
**TOWN OF HARTFORD, VERMONT**

**ORDINANCE RELATING TO REGULATING THE COLLECTION  
AND DISPOSAL OF SOLID WASTE**

**ADOPTED BY BOARD OF SELECTMEN OCTOBER 30, 1990**

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## **CHAPTER 10**

### **An Ordinance Relating to Regulating the Collection and Disposal of Solid Waste**

Be it ordained by the Board of Selectmen of the Town of Hartford as follows:

#### **ARTICLE I PURPOSE**

##### **10.1.1**

To protect the health and welfare of the citizens of Hartford and to promote the conservation of natural resources and the wise use of the environment, the Board of Selectmen of the Town of Hartford hereby adopt this ordinance to regulate the separation, recovery, collection, removal, storage and disposition of solid waste, including recyclables, in the Town of Hartford, Vermont.

#### **ARTICLE II DEFINITIONS**

##### **10.2.1**

- A. "Air Contaminants" shall mean dust, fumes, mist, smoke, other particulate matter, vapor, gas, odorous substances, or any combination thereof.
- B. "Authorization" by the Town of Hartford means authorized pursuant to a legal contract or other written authorization entered into by the Town of Hartford and a private third person as defined herein.
- C. "Emission" shall mean a release into the outdoor atmosphere of air contaminants.
- D. "Commercial Hauler" shall mean any Person who collects and/or hauls solid waste that is generated within the Town of Hartford or brings waste into the Town of Hartford that is intended for disposal at the Town's landfill site except those defined as a "Residential Hauler".
- E. "Residential Hauler" shall mean any individual who hauls residential solid waste from their own individual residence that is located within the Town of Hartford or a member community.
- F. "Incineration" shall mean the burning of solid waste in an enclosed indoor or outdoor container.
- G. "Open Fire Burning" shall mean burning of solid waste in the open where the products of combustion are emitted directly into the atmosphere without passing through a stack, chimney or other enclosure.

H. "Person" shall mean any person, firm, partnership, association, corporation, company or organization of any kind.

I. "Recyclable" shall mean recyclable material as specifically identified in regulations promulgated by the Board of Selectmen.

J. "Solid Waste" shall mean any solid waste as defined in Title 10 V.S.A. section 6602 (See Appendix A for Title 10 V.S.A. Section 6602).

### ARTICLE III AUTHORITY

#### 10.3.1

In accordance with Title 10, Chapter 159 of Vermont Statutes Annotated, the Town of Hartford is responsible for the management and regulation of the storage and collection of solid wastes within the limits of the Town, in conformance with the State solid waste management plan authorized under Chapter 159 of Title 10. The Town may issue local franchises and may make, amend or repeal rules necessary to manage the storage and collection and disposal of solid waste materials within their limits and impose penalties for violations thereof, provided that the rules are consistent with the State plan and rules promulgated by the Secretary of the Agency of Natural Resources.

### ARTICLE IV COLLECTION

#### 10.4.1

The Board of Selectmen is authorized to employ or make contracts with individual persons for the separation, recovery, collection, removal, storage, or disposition of solid waste, including recyclables. Contracts which are awarded pursuant to this authority shall be advertised or otherwise put to competitive bid. Contracts may be rejected or awarded at the sole discretion of the Board of Selectmen for any reasons which they deem appropriate, including but not limited to, the efficiency of scale, past performance of a contractor, stability of operation, and need for competition. The Board of Selectmen may adopt regulations regulating the preparation of solid waste for collection.

All Commercial Haulers of solid waste in the Town of Hartford shall register with the Town Manager and such registration shall constitute authorization to collect solid waste but not recyclables. Authorization to collect recyclables shall be a separate authorization. Authorization(s) may be revoked for violation(s) of this Ordinance. The Board of Selectmen may designate the disposal

location for all solid waste collected within the Town limits. The Board of Selectmen may set a registration fee and may require all commercial haulers to charge for collection and hauling services on a per quantity basis. The Board may require documentation that charges are based on a per quantity basis. The information would be considered proprietary information and consequently would not be made public.

#### ARTICLE V

##### 10.5.1

#### PUBLIC SAFETY

No person having the custody or control of residential, industrial or business premises from which solid waste, including recyclables, is collected for disposal in the Town of Hartford shall permit or cause any solid waste, including recyclables, within their control to become a hazard to public travel, health or safety or to become a nuisance of any sort. Solid waste, other than yard waste, may not be deposited or otherwise left out of doors unless it has been placed in the proper container as defined by regulations promulgated pursuant to this ordinance. Household hazardous wastes may only be disposed of in accordance with regulations adopted by the Board of Selectmen from time to time.

#### ARTICLE VI

##### 10.6.1

#### ILLEGAL DUMPING

It shall be unlawful for any person, business, or corporation to enter any Town of Hartford solid waste facility when said facility is not open; nor shall they deposit, dump, or leave solid waste of any kind in any such facility or adjacent hereto, whenever said facility is not open.

##### 10.6.2

It shall be unlawful for any person to deposit, dump, or leave solid waste on or in any privately owned or maintained disposal container other than their own, nor any other private property, without the consent of the owner and obtaining any and all required local and state permits.

##### 10.6.3

It shall be unlawful to deposit in a municipally owned or maintained disposal container any solid waste other than that created or originated in any public buildings/grounds/highways or on the person of anyone using said public buildings/grounds/highways.



## ARTICLE VII

## 10.7.1

## OPEN FIRES AND INCINERATORS

Except as provided by this article, the burning of any solid waste, either by open fire or incineration, in the Town of Hartford is prohibited.

## 10.7.2

A specific written permit may be granted by the Fire Chief or his designee for the open burning of yard and garden debris including trees, stumps, brush, untreated wood, lawn clippings, and leaves; provided the Fire Chief is satisfied that no hazardous condition will be created by such burning and the emission of air contaminants will not create a danger to the health and property of the citizens of the Town of Hartford.

Permits which are issued under the provisions of this ordinance shall be for a specified date, time and location and only for specified materials. The Selectmen of the Town of Hartford reserve the right to establish a fee for the issuance of such permits.

This article does not apply to medical/infectious wastes that are incinerated at the V.A. Hospital.

## ARTICLE VIII

## 10.8.1

## SEPARATION OF RECYCLABLES

Except as hereinafter provided, recyclables from all residences shall be kept separate from other solid waste, either delivered to a private or Town collection facility, or placed at the street curb or designated area, as defined in regulations adopted pursuant to this ordinance. Recyclables placed at the curb or curblane shall be placed in a manner designated by regulation as established by the Board of Selectmen for collection on the morning of the collection day as set forth under a schedule determined by the Town Manager.

## 10.8.2

Apartments, condominium, businesses, institutions and industries located within the Town of Hartford shall separate recyclables from all other solid waste in accordance with regulations adopted pursuant to this ordinance and shall have an area designated for recyclables. The area so designated shall be clearly marked.

## 10.8.3

In accordance with regulations adopted pursuant to this ordinance, any person within the Town of Hartford may properly dispose of recyclables at private collection facilities or at collection areas maintained by the Town of Hartford or its designated agent for that purpose. Recyclables shall be separated from solid waste according to standards that shall be promulgated as regulations pursuant to this ordinance by the Board of Selectmen.

## 10.8.4

Placement requirements may be waived for reasons of age, infirmity or handicap.

## ARTICLE IX

## 10.9.1 COLLECTION BY UNAUTHORIZED PERSON

It shall be a violation of this ordinance for any person not authorized by the Town of Hartford to collect or pick up or cause to be collected or picked up any solid waste, including recyclables. This does not apply to "green-up" efforts along roadways. Any and each such collection shall constitute a separate and distinct offense punishable as hereinafter provided.

## ARTICLE X

## 10.10.1 PENALTIES &amp; ENFORCEMENT

Any person violating any provision of this ordinance or the regulations enacted hereunder shall be fined not more than \$500 for each offense except as provided by this article.

## 10.10.2

The Town of Hartford, or its designated agent, reserves the right to refuse to collect solid waste or to refuse to allow disposal at any facility operated by the Town or for the benefit of the Town where this ordinance or the regulations promulgated hereunder are ignored or violated. The Town further reserves the right to terminate the authorization of any commercial or residential hauler who violates this ordinance or the regulations promulgated hereunder. Termination of authorization may include, but not limited to, revocation of license to collect, haul, and dispose of solid waste.

## 10.10.3

Unless otherwise provided for herein, each day that a violation shall continue or exist shall constitute a separate offense.

## 10.10.4

The Town of Hartford may, upon the violation of any provision of this ordinance, maintain an action to enjoin the violation of these ordinances, or any regulations adopted to implement the same, but the election of the Town to proceed with an application or petition for an injunction shall not prevent a criminal prosecution for the violation of this ordinance. Expenses incurred by such action shall be recovered by the person whose legal duty it was to comply with these ordinances.

## 10.10.5

Any person violating a provision under Article VIII shall be fined not more than \$100 for each offense and/or denied authorization to pick up any solid waste or dispose of solid waste within the Town of Hartford.

## 10.10.6

Enforcement of Articles IV, V, and VIII shall provide all persons a reasonable period of time and opportunity to correct violations prior to pursuing penalties and/or fines.

ARTICLE XI  
INCONSISTENT REPEAL

## 10.11.1

All ordinances or parts of ordinance, resolutions, regulations or other documents inconsistent with the provisions of this ordinance are hereby repealed to the extent of such inconsistency.

ARTICLE XII  
SEVERABILITY

## 10.12.1

This ordinance and the various parts, sentences, sections and clauses thereof, are hereby declared to be severable. If any part, sentence, section, or clause is adjudged invalid, it is hereby provided that the remainder of this ordinance shall not be affected thereby.

ARTICLE XIII  
EFFECTIVE DATE

## 10.13.1

This ordinance shall take effect on January 1, 1991.

REGULATIONS FOR THE COLLECTION  
AND RECYCLING OF SOLID WASTE  
IN THE TOWN OF HARTFORD

I. DEFINITIONS

"Commercial Solid Waste" shall mean garbage, refuse and other discarded solid materials generated by normal business and institutional activities, and having no value to the owner at the time it is discarded.

"Commercial Recyclables" shall mean corrugated cardboard, office paper, newspaper, leaves/grass and either aluminum and steel cans or glass containers.

"Waste Container" shall mean a metal or plastic garbage can or dumpster with a lid that securely fastens, or a securely tied plastic bag.

"Collection Box" shall mean a plastic bin or garbage can issued by the Town for the purpose of collecting recyclables.

"Curbside" shall mean an area adjacent to the street curb, but in no case greater than 10 feet from the curb, nor directly on the traveled portion of any Town road or sidewalk.

"Person" shall mean any person, firm, partnership, association, corporation, company, or organization of any kind.

"Designated Area" shall mean an area designated for storage of solid waste and recyclables readily accessible at all times by a conventional solid waste collection truck or mutually agreed on by the waste generator and their hauler.

"Commercial Hauler" shall mean any Person who collects and/or hauls solid waste that is generated within the Town of Hartford except those defined as "Residential Haulers".

"Residential Hauler" shall mean any individual who hauls residential solid waste from their own individual residence that is located within the Town of Hartford or a member community.

"Residential Recyclables" shall mean: clear, brown, and green glass bottles and jars; aluminum cans & ferrous (tin) cans; translucent plastic milk, cider, orange juice and water containers (high density polyethylene-HDPE); leaves; office paper; and newspaper.

"Residential Solid Waste" shall mean garbage, refuse and other discarded solid materials generated by normal household activities, and having no value to the owner at the time that it is discarded. Residential Solid Waste shall include wastes generated in single and multi-family housing, apartments, and condominiums.

"Resident" shall mean any person whose principal place of residence is within the Town of Hartford, including, but not limited to, homeowners, tenants, businesses, and corporations.

## II. PLACEMENT OF RESIDENTIAL RECYCLABLES & SPECIFIED HOUSEHOLD HAZARDOUS WASTES FOR CURBSIDE COLLECTION

1. Specified residential recyclables and household hazardous wastes listed under a, b, & c below must be separated from Residential Solid Waste, placed in a collection box, and placed at the Curbside or Designated Area on the scheduled day for collection of recyclables in accordance with a schedule formulated by the Town Manager.

a. All of the following materials, clear, green and brown glass containers; tin & aluminum food & beverage containers; translucent plastic (HDPE) containers, shall be rinsed with any food removed and with the tops or caps removed.

b. All used newspapers, with glossy advertising and coupon supplements removed, shall either be placed in the recyclables collection box or bagged in brown paper bags and placed next to the collection box. Glossy advertising and coupon supplements shall be disposed of as solid waste.

c. Household hazardous wastes that are to be placed out with the recyclables include all household batteries and used motor oil. Specific requirements for collection shall be determined by the Town Manager.

## III. COMMERCIAL RECYCLABLES FOR COLLECTION

Commercial recyclables must be separated from Commercial Solid Waste and either handled by a private hauler, taken directly to a private or the Town's recycling facility(ies), or in a manner consistent with the Solid Waste Ordinance or these Regulations. Recyclables shall be prepared in accordance with specifications provided by the Hauler. Those recyclables taken to the Town's recycling facility must meet the specifications provided by the Town Manager.

## IV. BRUSH AND GRASS CLIPPINGS

No grass clippings or leaves and garden organic materials

shall be disposed of with Residential or Commercial Solid Waste, but shall be disposed of in one of the following alternative disposal mechanisms:

- a. Residents & commercial establishments are encouraged to compost and mulch yard and vegetable wastes in their backyards or other locations that would not cause this material to create a nuisance.
- b. Grass clippings, leaves, and garden organic materials may be deposited in a container so marked at the Town's Recycling Center.

V. SPECIAL WASTES/RECYCLABLES

Tires, car & truck batteries, metal appliances and other large metal items shall not be disposed of with residential or commercial solid waste. These items must be removed and placed in containers provided at the Recycling Center. There will be a charge for these items as set by the Board of Selectmen.

VI. REQUIREMENT OF AUTHORIZED COMMERCIAL HAULERS

1. No Commercial Hauler shall knowingly collect Residential or Commercial Solid Waste which does not have Recyclables including leaves and grass clippings, tires, car & truck batteries, motor oil, household batteries, metal appliances, and other large metal items separated from it.
2. All Commercial Haulers shall charge customers for non-recyclable solid waste on a per quantity basis.
3. No Person shall collect Residential or Commercial Recyclables or Residential or Commercial Solid waste placed at the curbside or designated area unless they are authorized by the Town. Licenses shall be obtained annually through the Town Manager's Office. All Commercial Haulers shall deliver the residential and commercial solid waste they collect within the Town limits to the Hartford Landfill site unless their license states otherwise. This does not apply to medical/infectious wastes that are incinerated at the V.A. Hospital. Authorization and licenses to collect Solid Waste or Recyclables may be suspended or revoked by the Manager for failure to abide by these regulations or payment of fees and charges.
4. Commercial Haulers shall report to the Town Manager any obvious violation of these regulations by a Resident, Commercial Hauler, or any other person.

5. Failure to abide by these regulations may cause suspension or revocation of any authorization or license, or enforcement of any other penalties provided by law.

#### VII. REQUIREMENT OF SOLID WASTE/RECYCLABLES GENERATORS

Any rejected Residential or Commercial Solid Waste and/or Recyclables not properly separated or placed in accordance with these regulations shall be the sole responsibility of that homeowner, business, tenant, or corporation and shall be retrieved within 24 hours.

#### VIII. EFFECTIVE DATES/ENFORCEMENT

1. These regulations will go into effect on January 1, 1991. Effective date for Residential Recycling is June 1, 1991. Effective dates for Commercial Recycling is July 1 through December 31, 1991 (see schedules below).

##### Residential Recyclables

<u>Material</u>	<u>Effective Dates</u>
Glass Bottles & Jars	June 1, 1991
Cans (aluminum & steel)	June 1, 1991
Translucent HDPE (milk jugs)	June 1, 1991
Newspaper	June 1, 1991
Leaves	June 1, 1991
Office Paper	June 1, 1991

##### Commercial Recyclables

<u>Material</u>	<u>Effective Dates</u>
Corrugated Cardboard	July 1, 1991
Newspaper	July 1, 1991
Office Paper	July 1, 1991
Leaves/Grass	July 1, 1991
Glass Bottles & Jars or Cans (aluminum & steel)	December 31, 1991

2. The Town will pursue an enforcement policy regarding recycling requirements that shall provide all persons period

of time and opportunity to meet performance requirements and to correct violations prior to pursuing penalties and/or fines. This includes providing information and education programs and utilizing verbal warnings and written warnings prior to instituting enforcement fines and/or penalties. There shall also be a minimum six month period after ordinance adoption prior to regulation effective date(s).

3. The Town Manager or his/her designee shall be responsible for enforcement. The Board of Selectmen shall act as an Appeal Board for all appeals that are not resolved after appeal to the Town Manager.



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AN ORDINANCE RELATING TO SEPARATION  
OF RECYCLABLES FROM OTHER SOLID WASTE  
IN THE TOWN OF HARTLAND, VERMONT

ARTICLE I  
PURPOSE

To protect the health and welfare of the citizens of Hartland and to promote the conservation of natural resources and the wise use of the environment, the Board of Selectmen of the Town of Hartland hereby adopt this ordinance to regulate the separation, recovery, collection, removal, storage and disposition of recyclables in the Town of Hartland, Vermont.

ARTICLE II  
DEFINITIONS

A. "Air Contaminants" shall mean dust, fumes, mist, smoke, other particulate matter, vapor, gas, odororous substances, or any combination thereof.

B. "Authorization" by the Town of Hartland means authorized pursuant to the legal contract or other written authorization entered into by the Town of Hartland and a private third person as defined herein.

C. "Emission" shall mean a release into the outdoor atmosphere of air contaminants.

D. "Commercial Hauler" shall mean any Person who collects and/or hauls solid waste that is generated within the Town of Hartland or brings waste into the Town of Hartland that is intended for disposal at the Town's designated landfill site except those defined as a "Residential Hauler".

E. "Residential Hauler" shall mean any individual who hauls residential solid waste from their own individual residence that is located within the Town of Hartland.

F. "Incineration" shall mean the burning of solid waste in an enclosed indoor or outdoor container.

G. "Open Fire Burning" shall mean burning of solid waste in the open where the products of combustion are emitted directly into the atmosphere without passing through a stack, chimney or other enclosure.

H. "Person" shall mean any person, firm, partnership, association, corporation, company or organization of any kind.

I. "Recyclable" shall mean recyclable material as specifically identified in regulations promulgated by the Board of Selectmen.

J. "Solid Waste" shall mean any solid waste as defined in Title 10 V.S.A. Section 6602.

**ARTICLE III  
SEPARATION OF RECYCLABLES**

**Section 1.**

Except as hereinafter provided, recyclables from all residences shall be kept separate from other solid waste, either delivered to a private or Town collection facility or the Hartford Land-fill.

**Section 2.**

Apartments, condominiums, businesses, institutions and industries located within the Town of Hartland shall separate recyclables from all other solid waste in accordance with regulations adopted pursuant to this ordinance.

**Section 3.**

In accordance with regulations adopted pursuant to this ordinance, any person within the Town of Hartland may properly dispose of recyclables at private collection facilities or at collection areas maintained by the Town of Hartland or its designated agent for that purpose. Recyclables shall be separated according to standards that shall be promulgated as regulations pursuant to this ordinance by the Board of Selectmen.

**Section 4.**

Placement requirement may be waived for reasons of age, infirmity or handicap.

**ARTICLE IV  
COLLECTION BY UNAUTHORIZED PERSON**

It shall be a violation of this ordinance for any person not authorized by the Town of Hartland to collect or pick up or cause to be collected or picked up any recyclables. Any and each such collection shall constitute a separate and distinct offense punishable as hereinafter provided.

**ARTICLE V  
PENALTIES & ENFORCEMENT**

**Section 1.**

Any person violating any provision of this ordinance or the regulations enacted hereunder shall be fined not more than \$500 for each offense except as provided by this article.

**Section 2.**

The Town of Hartland, or its designated agent, reserves the right to refuse to collect recyclables or to refuse to allow disposal at any facility operated by the Town or for the benefit of the Town where this ordinance or the regulations promulgated

hereunder are ignored or violated. The Town further reserves the right to terminate the authorization of any commercial or residential hauler who violates this ordinance or the regulations promulgated hereunder. Termination of authorization may include, but not limited to, revocation of license to collect, haul, and dispose of recyclables.

### Section 3.

Unless otherwise provided for herein, each day that a violation shall continue or exist shall constitute a separate offense.

### Section 4.

The Town of Hartland may, upon the violation of any provision of this ordinance, maintain an action to enjoin the violation of these ordinances, or any regulations adopted to implement the same, but the election of the Town to proceed with an application or petition for an injunction shall not prevent a criminal prosecution for the violation of this ordinance. Expenses incurred by such action shall be recovered by the person whose legal duty it was to comply with these ordinances.

## ARTICLE VI INCONSISTANT REPEAL

All ordinances or parts of ordinance, resolutions, regulations or other documents inconsistent with the provisions of this ordinance are hereby repealed to the extent of such inconsistency.

## ARTICLE VII SEVERABILITY

This ordinance and the various parts, sentences, sections and clauses thereof, are hereby declared to be severable. If any part, sentence, section, or clause is adjudged invalid, it is hereby provided that the remainder of this ordinance shall not be affected thereby.

## ARTICLE VIII EFFECTIVE DATE

This ordinance shall take effect June 1, 1991.

REGULATIONS FOR THE COLLECTION OF RECYCLABLES  
IN THE TOWN OF HARTLAND, VERMONT

I. DEFINITIONS.

"Commercial Solid Waste" shall mean garbage, refuse and other discarded solid materials generated by normal business and institutional activities, and having no value to the owner at the time it is discarded.

"Commercial Recyclables" shall mean corrugated cardboard, office paper, newspaper, leaves/grass and either aluminum and steel cans or glass containers.

"Waste Container" shall mean a metal or plastic garbage can or dumpster with a lid that securely fastens, or a securely tied plastic bag.

"Collection Box" shall mean a plastic bin or garbage can issued by the Town for the purpose of collecting recyclables.

"Curbside" shall mean an area adjacent to the street curb, but in no case greater than 10 feet from the curb, nor directly on the traveled portion of any Town road or sidewalk.

"Person" shall mean any person, firm, partnership, association, corporation, company or organization of any kind.

"Designated Area" shall mean an area designated for storage of solid waste and recyclables readily accessible at all time by a conventional solid waste collection truck or mutually agreed on by the waste generator and their hauler.

"Commercial Hauler" shall mean any Person who collects and/or hauls solid waste that is generated within the Town of Hartland except those defined as "Residential Haulers".

"Residential Haulers" shall mean any individual who hauls residential solid waste from their own individual residence that is located within the Town of Hartland.

"Residential Recyclables" shall mean: clear, brown and green glass bottles and jars; aluminum cans and ferrous (tin) cans; translucent plastic milk, cider, orange juice and water containers (HDPE); leaves; office paper; and newspaper.

"Residential Solid Waste" shall mean garbage, refuse and other discarded solid waste materials generated by normal household activities, and having no value to the owner at the time that it is discarded. Residential Solid Waste shall include wastes generated in single and multi-family housing, apartments and condominiums.

"Resident" shall mean any person whose principal place of residence is within the Town of Hartland, including, but not limited to, homeowners, tenants, businesses and corporations.

## II. PLACEMENT OF RESIDENTIAL RECYCLABLES & SPECIFIED HOUSEHOLD HAZARDOUS WASTES FOR COLLECTION

1. Specified residential recyclables and household hazardous wastes listed under a, b & c below must be separated from Residential Solid Waste and placed in the Town Recycling Facility or brought to the Hartford Landfill.

a. All of the following materials; clear, green and brown glass containers; tin and aluminum food and beverage containers; translucent plastic (HDPE) containers, shall be rinsed with all food removed and with the tops or caps removed.

b. All used newspapers, with glossy advertising and coupon supplements removed, shall either be placed directly in the Town Recycling Facility or bagged in brown paper bags. Glossy advertising and coupon supplements shall be disposed of as solid waste.

c. Household hazardous wastes that are to be separated out with the recyclables include all household batteries and used motor oil. Specific requirements for disposal shall be determined by the Hartford Landfill.

## III. COMMERCIAL RECYCLABLES FOR COLLECTION

Commercial recyclables must be separated from Commercial Solid Waste and either handled by a private hauler, taken directly to a private or the Town's recycling facility or in a manner consistent with the Solid Waste Ordinance or these Regulations. Recyclables shall be prepared in accordance with specifications provided by the Hauler. Those recyclables taken to the Town's recycling facility must meet the specifications provided by the Town Manager.

## IV. BRUSH AND GRASS CLIPPINGS

No grass clippings or leaves and garden organic materials shall be disposed of with Residential or Commercial Solid Waste, but shall be disposed of in one of the following alternative disposal mechanisms:

a. Residents & commercial establishments are encouraged to compost and mulch yard and vegetable wastes in their backyards or other locations that would not cause this material to create a nuisance.

b. Grass clippings, leaves and garden organic materials may be deposited in a container so marked at the Hartford Recycling Center.

## V. SPECIAL WASTES/RECYCLABLES

Tires, car & truck batteries, metal appliances and other large metal items shall not be disposed of with residential or commercial solid waste. These items must be removed and placed in containers provided at the Hartford Recycling Center. There will be a charge for these items as set by the Hartford Board of Selectmen.

## VI. REQUIREMENT OF AUTHORIZED COMMERCIAL HAULERS

1. No Commercial Hauler shall knowingly collect Residential or Commercial Solid Waste which does not have Recyclables including leaves and grass clippings, tires, car and truck batteries, motor oil, household batteries, metal appliances, and other large metal items separated from it.

2. No Person shall collect Residential or Commercial Recyclables unless they are authorized by the Town. Licenses shall be obtained annually through the Town Manager's Office. All Commercial Haulers shall deliver the residential and commercial recyclables they collect within the Hartland Town limits to the Hartford Landfill site unless their license states otherwise. Authorization and licenses to collect Recyclables may be suspended or revoked for failure to abide by these regulations or payment of fees and charges.

3. Commercial Haulers shall report to the Town Manager any obvious violation of these regulations by a Resident, Commercial Hauler or any other person.

4. Failure to abide by these regulations may cause suspension or revocation of any authorization or license, or enforcement of any other penalties provided by law.

## VII. REQUIREMENT OF RECYCLABLES GENERATORS

Any rejected Residential or Commercial Recyclables not properly separated or placed in accordance with these regulations shall be the sole responsibility of that homeowner, business, tenant or corporation and shall be retrieved within 24 hours.

## VIII. EFFECTIVE DATES/ENFORCEMENT

1. Effective date for Residential Recycling is June 1, 1991. This includes the following materials: glass bottles and jars; cans (aluminum and steel); translucent HDPE (milk jugs); newspaper; leaves; office paper. Effective dates for Commercial Recycling is July 1, 1991 for the following materials: corrugated cardboard; newspaper, office paper; leaves/grass. Effective date for Commercial Recycling of glass bottles and jars or cans (aluminum and steel) is December 31, 1991.

2. The Town of Hartland will pursue an enforcement policy regarding recycling requirements that shall provide all persons period of time and opportunity to meet performance requirements and to correct violations prior to pursuing penalties and/or fines. This includes providing information & education programs and utilizing verbal warnings and written warnings prior to instituting enforcement fines and/or penalties.

3. The Hartland Town Manager or his/her designee shall be responsible for enforcement. The Board of Selectmen shall act as an Appeal Board for all appeals that are not resolved after appeal to the Town Manager.

**APPENDIX B**

**U.S. EPA IDENTIFICATION NUMBERS  
FOR THE FLOOD CONTROL PROJECTS  
(list furnished by U.S. EPA)**



## DISTRICT

FEB 1931

INS # INSTALLATION NAME

CO

## NEW ENGLAND DISTRICT

00047	ANSONIA-DERRY LOC PROT	CT
00048	CH BET NO&SO BROS ILS	VT
00049	CHATHAM STAGE HARBOR	MA
00050	DERRY LOCAL PROTECTION	CT
00051	DICKEY/LINCOLN SCH LAKE	ME
00053	PAWTHLET COVE	RI
00054	PLYMOUTH-LONG BEACH DIK	MA
09607	MANSFIELD HOLLOW LAKE	CT
09813	BIRCH HILL DAM	MA
09814	CAPE COD CANAL	MA
09815	KNIGHTVILLE DAM	MA
09817	TULLY LAKE	MA
09897	BLACKWATER RESERVOIR	NH
09898	EDWARD MACDOWELL LAKE	NH
09899	FRANKLIN FALLS RESERV	NH
09900	SURRY MOUNTAIN LAKE	NH
10143	UNION VILLAGE RESERVOIR	VT
11421	KENNERBUNK RIV JETTY	ME
12528	BALL MOUNTAIN RESERVOIR	VT
12533	HOPKINTON-EVERETT LAKES	NH
12535	NORTH SPRINGFIELD LAKE	VT
12541	THOMASTON DAM	CT
12542	TOWNSHEND LAKE	VT
12545	HODGES VILLAGE DAM	MA
12566	EAST BRIMFIELD LAKE	MA
12567	BUFFUMVILLE RESERVOIR	MA
12568	BARRE FALLS RESERVOIR	MA
12572	OTTER BROOK RESERVOIR	NH
12580	NORTH HARTLAND LAKE	VT
13528	WEST HILL DAM	MA
13663	WESTVILLE LAKE	MA
14726	LITTLEVILLE LAKE	MA
14746	RELAY STATION BUILDING	MA
15492	HANCOCK BROOK LAKE	CT
15503	NORTHFIELD BROOK LAKE	CT
15512	WEST THOMPSON LAKE	CT
16060	CHICOPEE FALLS LOCAL PR	MA
16061	CUNANT BROOK DAM	MA
16074	RELAY STATION BUILDING	CT
16080	PT JUDITH BREAKWATER SI	RI
19336	COLEBROOK RIVER LAKE	CT
19337	HOP BROOK LAKE	CT
19338	RELAY STATION BUILDING	VT
19808	BLACK ROCK LAKE	CT
19817	COLEBROOK RIVER LAKE	MA
32394	CHARLES RIVER NVS	MA

## **APPENDIX C**

### **GENERAL INFORMATION ON STATE HAZARDOUS WASTE PROGRAM**



# **HAZARDOUS WASTE GENERATOR HANDBOOK**

**Department of Environmental Conservation  
Hazardous Materials Management Division  
103 South Main Street/West Office  
Waterbury, Vermont 05671-0404  
(802) 241-3888  
May 1994**

**A GUIDE TO HAZARDOUS WASTE MANAGEMENT**

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Appendix A (Contact List)

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Appendix E (Contingency Plan)

## **PLEASE READ**

**This handbook is intended for use as a guidance document only. It is to be used as a reference to the basic requirements of Vermont's Hazardous Waste Management Regulations as they apply to hazardous waste generators. Persons using this document should clarify any questions by either reviewing the appropriate sections of the Regulations or contacting the Hazardous Materials Management Division at 802-241-3888.**

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## INTRODUCTION

The development of solvents and chemical production processes went largely unregulated for the first half of this century. Health and environmental effects of chemical dumping became apparent in the 1970's. Perhaps the most well known example of this in the nation, Love Canal in New York state, contributed impetus for the creation of laws to control how hazardous wastes are managed. Vermont has adopted its own laws implementing requirements of the Federal environmental protection laws otherwise known as the Resource Conservation and Recovery Act (RCRA) and the Comprehensive Environmental Response Compensation and Liability Act (CERCLA or Superfund). Vermont's Hazardous Waste Management Regulations (VHWMR) were developed to implement these environmental protection laws with the primary goal being the protection of human health and the environment by preventing hazardous waste releases. Management of hazardous wastes in accordance with the VHWMR will result in compliance with RCRA and substantially reduce potential liability for cleanup of business locations as a result of current and future operations. Cleanup costs are typically much greater than costs for proper management.

This handbook has been created to help Vermont businesses determine if they are subject to the "generator" requirements of the VHWMR and, if so, to outline their responsibilities for effective hazardous waste management.

To assist readers in referencing the information provided in this handbook to the VHWMR, the relevant Section or Subchapter of the VHWMR is indicated, as needed, by either bold type or parentheses.

## WHAT IS HAZARDOUS WASTE?

Business owners are responsible for knowing if the waste that they generate is hazardous waste. **Subchapter 2 of the VHWMR** identifies those wastes that are regulated as hazardous wastes in Vermont. Each of these wastes is either included on at least one of five (5) lists (i.e. **listed wastes**), or exhibits one of four (4) characteristics (i.e. **characteristic wastes**). A more detailed description of listed and characteristic wastes is provided later in this section.

All hazardous wastes are identified by a code that consists of a capital letter(s) followed by a number (examples: D001, F002, K095, U237, P003, or VT02). The letter part of the code indicates either the specific list on which the waste is included or the specific characteristic that the waste exhibits; the number is specific to the type of waste. Some wastes may be identified by more than one code. An example is waste acetone solvent that exhibits the characteristic of ignitability (D001) and is listed (spent non-halogenated solvents / F003).

## Hazardous Waste Characteristics

1. **Ignitability (D001).** Wastes that have a flashpoint of less than 140° F are ignitable. Examples are waste gasoline, mineral spirits parts washing solvent, and paint thinner.
2. **Corrosivity (D002).** Wastes that are liquid and have a pH of  $\leq 2.0$  or  $\geq 12.5$  are corrosive. Examples are acid and caustic solutions.
3. **Reactivity (D003).** Wastes that undergo a rapid or violent reaction when exposed to water, shock, heat or pressure are reactive. Examples are perchlorate and peroxide.
4. **Toxicity (D004-D043, VT12, VT13).** Wastes containing small amounts of any one of ten (10) metals or thirty-one (31) organic compounds may exhibit the toxicity characteristic. To determine if a waste contains enough of one of these contaminants to exhibit the toxicity characteristic, the generator can either submit a sample for laboratory analysis or rely on knowledge of the waste or the process generating the waste. An example is debris from sandblasting an item painted with lead-based paint (D008).

## Hazardous Waste Lists

1. **F... wastes (F001-F039\*).** Wastes from various **general manufacturing or chemical processes**. An example is spent cyanide plating bath solution from electroplating operations (F007).
2. **K... wastes (K001-K136\*).** Wastes from **specific manufacturing or chemical processes**. An example is wastewater treatment sludge from the production of zinc yellow pigments (K004).
3. **U... wastes (U001-U359\*).** Wastes that are either **discarded or off-specification** chemical products. Examples include benzene (U019) and chlordane (U036).
4. **P... wastes (P001-P123\*).** Wastes that are **acutely hazardous**. An example is arsenic acid (P010). Please note that the VHWMR identify some special management requirements for these wastes due to their extremely hazardous nature.
5. **VT... wastes (VT01-VT11\*).** Wastes that are not regulated as hazardous wastes by the U.S. Environmental Protection Agency (EPA) but that are considered hazardous in Vermont. An example is sorbent contaminated with  $> 5\%$  by weight petroleum distillates (VT02).

\* Note that some of these codes are not yet assigned; examples include F013 through F018



## AM I A GENERATOR?

Any Vermont business that produces hazardous waste is classified as either a Conditionally Exempt Small Quantity Generator (CESQG) or a Generator. **This handbook is intended for use only by Generators.**

The criteria for these two categories are discussed below. While reviewing this information, keep in mind that:

- ▶ a business must evaluate the **rate** at which all hazardous waste is generated and the **quantity** of waste that is accumulated on-site.
- ▶ hazardous waste that is **recycled** (Subchapter 6) either on or off-site counts toward generation rate. A common example of a waste that is recycled off-site is mineral spirits solvent from parts washing units that are maintained by a contractor.
- ▶ wastes that are **exempt** from the provisions of the VHWMR (Section 7-203 and Subchapter 6) should not be considered when determining regulatory status. Examples of exempt wastes include waste oil that is re-refined, lead-acid batteries that are sent off-site for recycling and some petroleum contaminated soils (VHWMR Section 7-203 [16]) that are handled in accordance with Agency guidelines (copies of the Hazardous Materials Management Division document "**Agency Guidelines for Petroleum Contaminated Soil and Carbon Media**" are available upon request).

### **Your firm is a CESQG if:**

- ▶ it generates less than 220 pounds (100 kg) of hazardous waste in every month of the year and falls below the Generator criteria identified below. **CESQGs should request the Hazardous Materials Management Division publication "Exempt Small Quantity Generator's Handbook; A Guide To Hazardous Waste Management".**

### **Your firm is a Generator if:**

- ▶ it generates more than **220 pounds\*** (100 kilograms) of hazardous waste per month (in any one month of the calendar year); or
- ▶ it generates more than **2.2 pounds** (1 kilogram) of **acutely** hazardous waste per month (P... listed wastes); or
- ▶ it generates more than **220 pounds** (100 kilograms) of hazardous **spill debris** per month; or

- ▶ it accumulates more than **2200** pounds (1000 kilograms) of hazardous waste at any one time.
- ▶ In general terms, 220 pounds of a liquid (water-based) waste fills about one-half of a 55-gallon drum, and 2200 pounds fills about five 55-gallon drums. **These volume estimates may vary, depending on the type of hazardous waste.** For example, waste paint filters may weigh as little as 60 pounds per drum, while grinding sludge, contaminated soils, and oil-soaked sorbent may weigh as much as 800 pounds per drum.

## **REGULATORY REQUIREMENTS**

Generators are required to comply with the VHWMR and are subject to **unannounced inspections** by Hazardous Materials Management Division (HMMD) inspectors. A copy of the checklist used by the inspectors is provided as **Appendix B**. Occasional review of the inspectors' checklist will assist generators in evaluating whether or not they meet VHWMR requirements.

VHWMR requirements that apply to generators may be loosely divided into the categories of **Documentation and Waste Handling**.

## **DOCUMENTATION**

There are eight (8) documents / forms that every generator is, in some way, responsible for: a brief description of each follows. It is the generator's responsibility to ensure that the information in these documents is accurate and complete.

### **1. Notification of Hazardous Waste Activity Form (VHWMR Section 7-104)**

This one page form, which is available from the HMMD upon request, requires general information about the generator and the hazardous wastes generated. Completed notification forms must be submitted to the HMMD and must be updated whenever the reported information changes. A copy of a notification form is provided as **Appendix C**.

Once the form has been filed with the HMMD, a **site-specific EPA Identification Number** is issued to the generator. This number, which is comprised of the letters VTD followed by nine digits (e.g. VTD123456789), is required information on hazardous waste labels, manifests and annual reports.

## 2. Manifests (VHWMR Subchapter 7)

When generators ship hazardous wastes off-site for treatment, storage or disposal, a **hazardous waste manifest must be used**. This document is used to track waste from the site of generation to the final disposal site. Most states have developed their own manifest forms.

Vermont's manifest document includes **eight (8) copies** of the one page manifest form. Each copy serves a specific role in tracking hazardous waste (**directions are provided at the bottom of each copy**). Generators must retain a copy of the manifest upon shipment and must receive a copy completed by the Treatment, Storage or Disposal Facility (TSDF) within **35 days** of shipment. Additional documentation is required for wastes that are exported (Section 7-705) to a foreign country.

Manifests, which are usually provided to the generator by the transporter or TSDF, are also available from the HMMD upon request. A copy of a Vermont manifest is provided as **Appendix D**.

All manifested hazardous waste shipments are subject to **Vermont hazardous waste taxes**; quarterly tax bills are issued by the HMMD. The tax rate structure is designed to encourage generators to ship wastes for recycling or treatment rather than for storage or landfill disposal. The per pound/per gallon rates for recycling or treatment are less than those for the other disposal options. For more information about hazardous waste taxes, contact the HMMD.

## 3. Land Disposal Restriction (LDR) Notification Forms (VHWMR Section 7-106)

Certain hazardous wastes are restricted from land disposal (even at land disposal facilities certified to accept some hazardous wastes). Generators of these restricted wastes must provide written notification to the TSDF receiving these wastes. A copy of this LDR Notification Form must be **retained by the generator for five (5) years** from the date of shipment.

Notification forms are generally developed by, and available from, the TSDF and/or transporter that is contracted by the generator to handle the waste. These forms are not uniform even though specific information is required for adequate facility notification.

A copy of the EPA guidance document "Land Disposal Restrictions; Summary Of Requirements" is available from the HMMD upon request.

4. **Contingency Plan (VHWMR Section 7-309 [3])**

This plan, which is developed by the generator, describes the specific actions to be implemented in the event of an imminent or actual emergency involving hazardous wastes. An example of a contingency plan is provided as **Appendix E** (although this generic plan includes all required elements, it must be modified to address your facility).

The required elements of a contingency plan include identification of the individuals responsible for coordinating the plan's implementation, a list of the available emergency equipment and information about the location of that equipment, the specific procedures to be followed in the event of an emergency, and an evacuation plan. A copy of a current contingency plan must be submitted to local authorities including police, hospitals, fire departments, and emergency responders.

A contingency plan must be **updated** whenever:

- . the applicable regulations change
- . the plan fails in an emergency
- . the facility changes (in a way that effects the content of the plan)
- . the list of emergency coordinators changes
- . the list of emergency equipment changes

For assistance in developing a contingency plan that also meets VOSHA requirements, contact the VOSHA Consultation Program at (802) 828-2765.

5. **Personnel Training Plan (VHWMR Section 7-309 [4])**

This plan, also developed by the generator, must outline a training program for all hazardous waste handlers and managers. Adequate training ensures that these personnel are familiar with waste handling requirements and the contingency plan.

Generators are required to maintain records documenting both initial training provided to new employees and annual update training. Training records for current employees must be kept on file until closure of the facility. Training records of former employees must be kept for three years from the date that the employee last worked at the facility. Records that identify the job titles and job descriptions for each employee that handles or manages hazardous waste must also be maintained.

Generators must also comply with VOSHA requirements and local fire and safety codes. For assistance in creating a Personnel Training Plan that takes into account hazardous materials as well as hazardous wastes, contact the VOSHA Consultation Program at (802) 828-2765.

## **6. Toxics Use Reduction Plan/Hazardous Waste Reduction Plan**

Beginning in 1993, generators of more than 2640 pounds of hazardous waste per year were required to prepare a Toxics Use and Hazardous Waste Reduction Plan. Plan summaries must be submitted to the Pollution Prevention Division of the Department of Environmental Conservation.

The Toxics Use / Hazardous Waste Reduction Plan must examine methods for reducing the amount of toxic substances used and the amount of hazardous wastes generated. An implementation schedule must be established for those methods or strategies identified in the plan that are technically and economically feasible. For more information contact the Pollution Prevention Division at 1-800-974-9559.

## **7. Annual Reports (VHWMR Section 7-802)**

Annual reports summarize a generator's hazardous waste activity from the previous calendar year. Generators must submit an annual report to the HMMD by March 1 of each year. Generators that do not receive a report form from the HMMD by the first of January should request one.

## **8. Other**

The inventory and inspection logs that are required for the short-term storage of hazardous wastes are discussed in the Handling Requirements section of this handbook.

# **HANDLING REQUIREMENTS**

Generators must handle hazardous wastes according to the requirements outlined in Subchapter 3 of the VHWMR. A brief description of each of these requirements follows.

Storage of waste containers except that which meets "satellite accumulation" criteria is limited to **90 days** for generators of **2200 pounds** or more per month; generators of **less than 2200 pounds** per month may store wastes for no longer than **180 days**. A generator must ship stored waste to a certified TSDF or recycler before exceeding these timeframes. To store wastes for longer than 90 or 180 days, a facility must become **certified** as a hazardous waste storage facility. (If, for an unforeseen circumstance, the generator is not able to ship stored hazardous waste within the appropriate timeframe, the HMMD may grant a 30-day extension. Extensions are evaluated on a case-by-case basis.)

- ▶ **Containers.** Hazardous wastes must be accumulated and stored in containers that are compatible with the waste and that are in good condition. Containers must be Department of Transportation approved for highway transportation.

- ▶ **Tanks.** A generator storing hazardous wastes in tanks must comply with secondary containment, monitoring, tank testing and other requirements of the Federal Hazardous Waste Regulations. Contact the HMMD for more information about these requirements.
- ▶ **"Satellite" Accumulation.** Up to 55 gallons of hazardous waste may be accumulated at or near the point where the waste is generated if the waste is under the control of the operator of the process generating the waste. The container accumulating the waste must be kept covered. It must also be marked to identify the type of waste and to indicate that the waste is hazardous waste. A satellite accumulation container must be moved to the short-term storage area within **three days** of becoming full (Section 7-308 [5]).
- ▶ **Short-Term Hazardous Waste Storage Area.** Full containers of hazardous waste, and any accumulation containers that are not "satellite" accumulation containers, must be stored in a designated short-term hazardous waste storage area. Tanks used to store hazardous waste must also meet the short-term storage requirements.

**Requirements of short-term hazardous waste storage areas:**

- ✓ The area must be properly identified by a warning sign bearing the words: **Hazardous Waste Storage Area - Authorized Personnel Only**. If ignitable wastes are stored, a "No Smoking" sign must also be posted.
- ✓ The storage area floor must be **impermeable**, and the storage area must be **protected** from rain and snow.
- ✓ Containers must be **labeled** to identify the contents and to indicate that the container holds hazardous waste. The label should also include the date when the drum was filled, the generator's name and address, EPA ID Number, and other required language. Labels are available from various vendors.
- ✓ Containers must be kept **closed**. Evaporation of waste from open containers is prohibited.
- ✓ Containers must be stored with a minimum of 24" of **aisle space** between rows so that containers / labels are accessible.
- ✓ **Safety and emergency equipment** must be available in the storage area. Examples of required equipment include a communication device or alarm, a fire extinguisher and spill control equipment.

- ✓ **Daily inspections** of the storage area must be conducted to ensure that containers are in good condition and that there is adequate safety equipment and aisle space. These inspections must be documented in a logbook that is signed and dated by the inspector.
- ✓ **An inventory** of all hazardous waste in storage must be kept at a location apart from the storage area. This is necessary so that, in the event of an emergency, a record of stored hazardous wastes is available.
- ✓ **Incompatible wastes** (e.g. acids and bases) must be kept separate from each other in the storage area.
- ✓ **Local fire and safety codes**, as well as other applicable regulations (such as VOSHA), must be adhered to.

## **TRANSPORT REQUIREMENTS**

Hazardous waste shipped off-site must be transported by an Agency of Natural Resources **certified hazardous waste transporter** using a manifest. Transporters are required to maintain a copy of a valid Vermont certification in each vehicle used to transport hazardous waste. The vehicles used for transport are permitted by the Department of Motor Vehicles (828-2073).

A list of Vermont certified transporters is available at no charge from the HMMD. Please note that a generator should use discretion when selecting a hazardous waste transporter as the generator is still responsible for the proper management of waste during transport.

## **HAZARDOUS WASTE REDUCTION/POLLUTION PREVENTION**

There are many advantages to reducing the amount of hazardous waste generated. Some advantages are reduced regulatory burden, reduced liability, increased worker safety, and reduced costs for disposal of waste. By implementing the following suggestions, most generators can reduce, or possibly eliminate, hazardous wastes currently generated.

### **Inventory Management**

- ▶ Inventory all hazardous chemicals used and determine if it is necessary to use them.
- ▶ Employ a "first-in, first-out" system of inventory to ensure that materials do not expire and become hazardous waste.

## **Process Modification**

- ▶ Get feedback from employees on modifications and techniques that can reduce hazardous waste generation.
- ▶ Substitute non-hazardous materials for hazardous materials if possible.
- ▶ Modify processes to reduce hazardous waste generation; eliminate unnecessary cleaning steps, utilize counter-current flow in processes, or install closed-loop recycling systems.
- ▶ Improve process efficiency.
- ▶ Perform regular preventive maintenance on equipment.
- ▶ Improve housekeeping practices to prevent spills, leaks, or contamination of chemicals which would generate hazardous waste.

## **Recovery and Reuse**

- ▶ Recover and recycle hazardous waste on-site.
- ▶ Reuse waste in the process, or in other processes.

The suggestions listed above are general and may be implemented by most hazardous waste generators. If you would like technical assistance that is specific to your waste generating processes or more information about pollution prevention, contact the Pollution Prevention Division at 1-800-974-9559. Technical reference materials, case studies and on-site assistance are available. Assistance is confidential and free.



**Contact List**

**Hazardous Waste:**

**CONTACT:** Hazardous Materials Management Division  
Department of Environmental Conservation  
103 South Main Street/West Building  
Waterbury, Vermont 05671-0404  
(802) 241-3888

**To Report Accidents or Spills of Hazardous Waste:**

**CONTACT:** National Response Center (800) 424-8802  
Vermont Emergency Management Hotline (800) 641-5005

**Pesticide Wastes and Spraying:**

**CONTACT:** Vermont Department of Agriculture  
116 State Street/Drawer 20  
Montpelier, Vermont 05620-2901  
(802) 828-2420

**Discharges to Groundwater:**

**CONTACT:** Water Supply Division  
Department of Environmental Conservation  
Old Pantry Building  
Waterbury, Vermont 05671-0483  
(802) 241-3400

**Hazardous Waste and Toxics Use Reduction Technical Assistance:**

**CONTACT:** Pollution Prevention Division  
Department of Environmental Conservation  
103 South Main Street/West Building  
Waterbury, Vermont 05671-0404  
(802) 241-3888 or 1-800-974-9559

**Solid Waste Management:**

**CONTACT:** Solid Waste Management Division  
Department of Environmental Conservation  
103 South Main Street/Laundry Building  
Waterbury, Vermont 05671-0407  
(802) 241-3444

**Federal Hazardous Waste Regulations:**

**CONTACT:** U.S. EPA - Region I  
JFK Federal Building  
Boston, MA 02203  
(617) 573-5770  
or RCRA/Superfund/Underground Storage Tank Hotline 1-800-424-9346

Vermont Agency of Natural Resources  
Department of Environmental Conservation  
Hazardous Materials Management Division

HAZARDOUS WASTE INSPECTION CHECKLIST

GENERATOR

EPA ID #: \_\_\_\_\_  
File #: \_\_\_\_\_  
Name: \_\_\_\_\_  
Location/Directions: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Inspector(s): \_\_\_\_\_  
Date: \_\_\_\_\_  
Last Inspection: \_\_\_\_\_  
Inspection Category: \_\_\_\_\_  
RCRA Notifier as (Federal): \_\_\_\_\_  
Generator (>1000): \_\_\_\_\_  
(100-1000): \_\_\_\_\_  
(<100): \_\_\_\_\_  
Transporter: \_\_\_\_\_  
TSDF: \_\_\_\_\_  
Inspection type: \_\_\_\_\_  
Initial: \_\_\_\_\_  
Follow-up: \_\_\_\_\_  
Complaint: \_\_\_\_\_  
Other (Specify): \_\_\_\_\_  
Phone No: ( ) \_\_\_\_\_  
Contact: \_\_\_\_\_  
Title: \_\_\_\_\_  
Enforcement Action Contact: \_\_\_\_\_  
Title: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

A) Date Established at Present Location: \_\_\_\_\_  
B) No. of Employees, Shifts: \_\_\_\_\_  
C) Type of Activity: \_\_\_\_\_  
D) Products: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
E) Does the Facility have a)Municipal b)Dry Well c)Leachfield  
Corporate Headquarters: \_\_\_\_\_  
Mailing Address: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Consultants: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
Transporters: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RECORD REVIEW

General

7-305(1) Did the generator file a notification form? Y\_\_\_ N\_\_\_ N/A\_\_\_  
7-304 Did the generator make a hazardous waste determination for all waste generated? Y\_\_\_ N\_\_\_ N/A\_\_\_  
7-804(1)(b) Are test results maintained for three years after final disposal off-site for any hazard determination? Y\_\_\_ N\_\_\_ N/A\_\_\_  
Comments: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Manifests

7-702(1)(a) Did the generator use the appropriate uniform Hazardous Waste Manifest? Y\_\_\_ N\_\_\_ N/A\_\_\_  
7-702(1)(b) Is the facility designated on each manifest? Y\_\_\_ N\_\_\_ N/A\_\_\_  
7-702(1)(d) Is the transporter's name, signature and date of acceptance on the manifest? Y\_\_\_ N\_\_\_ N/A\_\_\_  
7-306(1) Is hazardous waste offered for shipment to transporters and TSDs with EPA ID numbers? Y\_\_\_ N\_\_\_ N/A\_\_\_  
7-306(3) If the waste is not considered hazardous in the disposal state, does the facility have that state's authorization to receive the waste? Y\_\_\_ N\_\_\_ N/A\_\_\_

7-306(4)	Did the generator complete the generator's portion of the manifest before offering the waste for shipment?	Y___ N___	N/A___				
7-702(1)(e)	Are all signed copies of the manifests retained for at least three years?	Y___ N___	N/A___				
7-702(1)(k)	Have completed copies arrived within thirty-five (35) days from the facility or sixty (60) days from the foreign consignee? (If no, see exception reports)	Y___ N___	N/A___				
Comments: _____							
_____							
_____							
_____							
<b>Exports</b>							
7-705(2)(a)	Did the generator notify EPA sixty (60) days before the export of a hazardous waste?	Y___ N___	N/A___	7-705(2)(a)(11)(D)	All points of entry and departure of each country the waste will pass?	Y___ N___	N/A___
Did the notification include:				7-705(2)(a)(11)(E)	A description of the means by which each shipment of waste will be transported (e.g., mode of transportation, type(s) of containers, etc.)?	Y___ N___	N/A___
7-705(2)(a)(1)	The generator's name, mailing address, telephone number and EPA identification number?	Y___ N___	N/A___	7-705(2)(a)(11)(F)	A description of the manner in which the hazardous waste will be treated, stored or disposed of in the receiving country?	Y___ N___	N/A___
By consignee:				7-705(2)(a)(11)(G)	The name and site address of the consignee and any alternate consignee?	Y___ N___	N/A___
7-705(2)(a)(11)(A)	A description of the hazardous waste, EPA code, DOT shipping name, hazard class and DOT code?	Y___ N___	N/A___	7-705(2)(a)(11)(H)	The name of any transit countries through which the waste will be sent, the length of time, and the nature of waste handling during such transit?	Y___ N___	N/A___
7-705(2)(a)(11)(B)	The frequency or rate and period of time for waste to be exported? (not to exceed 12 months per notification)	Y___ N___	N/A___	7-705(2)(b)	Was an EPA notification sent to the Office of International Activities?	Y___ N___	N/A___
7-705(2)(a)(11)(C)	The estimated total quantity of waste?	Y___ N___	N/A___	7-705(1)(b)	Has the receiving country consented to accept the waste?	Y___ N___	N/A___
				7-705(1)(c)	Does a copy of the EPA Acknowledgement of Consent accompany the shipments?	Y___ N___	N/A___
				7-804(4)(a)	Are copies of each notification of intent to export kept for three years?	Y___ N___	N/A___
				7-804(4)(b)	Are copies of the EPA Acknowledgements of Consent kept for three years?	Y___ N___	N/A___
				7-804(4)(c)	Are completed manifests from the consignee kept for three years?	Y___ N___	N/A___
Comments: _____							
_____							

# Exception Reports

Has an exception report been filed for:

7-707(1) (a)

No completed copy of the manifest from a TSD within thirty-five (35) days?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-707(1) (b)

No manifest copy from a foreign consignee within sixty (60) days?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-707(3) (c)

For waste returned to the United States?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-804(1) (a)

Are exception reports kept on file for three years?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Comments:

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## Annual Reports

7-802(1)

Did the generator file an annual report?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-804(1) (a)

Are annual reports kept for three years?

Y\_\_\_ N\_\_\_ N/A\_\_\_

## Contingency Plan

7-309(3)

Does the owner or operator have a written contingency plan for the facility?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Does the contingency plan contain:

7-309(3) (a) (i)

A description of the actions facility personnel must take to comply with Sections 7-309(3) (a) and 7-309(3) (e) in response to fires, explosions or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(3) (a) (iii)

Arrangements agreed to by local police departments, fire departments, hospitals, contractors and state and local emergency response teams to coordinate emergency services pursuant to section 7-309(2) (d)?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(3) (a) (iv)

An up to date list of names, addresses and phone numbers (office and home) of all persons qualified to act as emergency coordinator and other persons listed in the order in which they will assume responsibility as alternates?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(3) (a) (v)

An up to date list of all emergency equipment at the facility, including location, and physical description of each item?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(3) (a) (vi)

An evacuation plan including signals to be used to begin evacuation, evacuation routes and alternate evacuation routes?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(3) (b)

Are copies of the contingency plan and all revisions maintained at the facility and submitted to all local police and fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(3)(c)	Has the contingency plan been reviewed and immediately amended whenever:	7-309(3)(e)	Emergency Procedures:	Y	N	N/A
7-309(3)(c)(i)	Applicable regulations are revised?		Whenever there is an imminent or actual emergency situation does the emergency coordinator (or his designee when the emergency coordinator is on call) know to do the following immediately:			
7-309(3)(c)(ii)	The plan fails in an emergency?		Activate internal facility alarms or communication systems?			
7-309(3)(c)(iii)	The facility changes in a way that materially increases the potential for fires, explosions, or release of hazardous waste or hazardous waste constituents, or changes the response necessary in an emergency?		Notify appropriate state or local agencies with designated response roles if their help is needed?			
7-309(3)(c)(iv)	The list of emergency coordinators changes?		If a release has occurred, identify the source, character, amount and extent of any released materials by record review or chemical analysis?			
7-309(3)(c)(v)	The list of emergency equipment changes?		Assess hazards to human health and the environment, considering all direct and indirect effects?			
7-309(3)(d)	At all times is there at least one employee either at the facility or on call (i.e., available to respond to an emergency by reaching the facility within a short period of time) with the responsibility for coordinating all emergency response measures. This emergency coordinator must be familiar with all aspects of the facility's contingency plan, and the facility's locations and characteristics of waste handled, the location of all records within the facility and the facility layout. This person must have the authority to commit the resources needed to carry out the contingency plan?		If the emergency coordinator determines that the facility has had a fire, explosion or release which could threaten human health or the environment outside the facility did he/she:			
7-309(2)(d)	Have copies of the contingency plan been sent to, or other arrangements been made with, the local authorities?		Determine if local evacuation may be necessary, and, if so, notify appropriate local authorities and be available to assist local authorities in evacuation measures?			
			Notify the National Response Center (800-424-8802) and indicate his or her name and telephone number; name and address of the facility; time and type of incident; quantity of material(s) involved to the extent known and possible hazards to human health or the environment outside the facility?			
			Take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur, or spread to other hazardous waste at the facility?			
Comments:		7-309(3)(e)(vi)				

	These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers.	Y	N	N/A	hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed?	Y	N	N/A
7-309(3)(e)(vii)	If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate?				At a minimum, is the training program designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems, including, where applicable?			
7-309(3)(e)(viii)	Immediately after an emergency, the emergency coordinator must provide for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility?				Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment?			
7-309(3)(e)(ix)	Ensure that in the affected areas of the facility, no waste that may be incompatible with the released material is stored until cleanup procedures are completed and all emergency equipment is cleaned and restored to a usable condition?				Key parameters for automatic waste feed cutoff systems?			
					Communications or alarm systems?			
					Response to fires and explosions?			
					Response to groundwater contamination incidents?			
					Shutdown of operations?			
					Did facility personnel successfully complete the program required in Section 7-309(4)(a)-(c) within six months after the date of their employment or assignment to a facility or to a new position at a facility, whichever is later?			
					Are employees working in supervised positions until they have completed the training requirements of Section 7-309(4)(a)-(c)?			
					Do facility personnel take part in an annual review of the initial training required under Section 7-309(4)(a)-(c)?			

### Personnel Training

Facility personnel must successfully complete a program of classroom instruction that teaches them to perform their duties in a way that ensures the facility's compliance with the following:

Is the program directed by a person trained in hazardous waste management procedures and does it include instruction which teaches facility personnel

7-309(4)(f) Does the owner or operator maintain the following documents and records at the facility?

7-309(4)(f)(i) The job title for each position at the facility related to hazardous waste management and the name of each employee?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(4)(f)(ii) A written job description for each position under Section 7-309(4)(f)(i) which includes the requisite skill, education or other qualifications and duties of personnel assigned to each position?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(4)(f)(iii) A written description of the type and amount of both introductory and continuing training that will be given to each person filling a position listed under Section 7-309(4)(f)(i)?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(4)(f)(iv) Records that document that the training or job experience required has been given to and completed by facility personnel in accordance with Section 7-309(4)(a)-(e)?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(4)(f)(v) Are training records kept on current personnel until closure of the facility?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Are training records on former employees kept for at least three years from the date the employee last worked at the facility?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(4)(g) The Secretary may independently verify successful completion of the instruction program in Section 7-309(4)(c) by examining trainees, employees or utilizing other appropriate methods.

Y\_\_\_ N\_\_\_ N/A\_\_\_

Comments:

### Short-Term Storage

For generators 100-1000 kg/month (220-2200 lbs/mo):

7-308(2) Storage less than 180 days? Y\_\_\_ N\_\_\_ N/A\_\_\_

7-308(2) Total accumulation less than 6000 kg at any time? Y\_\_\_ N\_\_\_ N/A\_\_\_

For generators >1000 kg/month:

7-308(1)(b) Storage less than 90 days? Y\_\_\_ N\_\_\_ N/A\_\_\_

Comments:

### Satellite Accumulation

7-308(5)(a) Is the container in good condition? Y\_\_\_ N\_\_\_ N/A\_\_\_

Are the wastes and container chemically compatible? Y\_\_\_ N\_\_\_ N/A\_\_\_

7-308(5)(b) Is the container closed except when adding or removing waste? Y\_\_\_ N\_\_\_ N/A\_\_\_

7-308(5)(c) Is the container labeled with the words "Hazardous Waste" and other words that identify the contents? Y\_\_\_ N\_\_\_ N/A\_\_\_

7-308(5)(d) Are full drums (55 gallons) stored less than three days at the satellite area? Y\_\_\_ N\_\_\_ N/A\_\_\_

Comments:

**DESIGNATED STORAGE AREA**

**Security**

Does the generator have a sign located at each storage area indicating "Danger-Hazardous Waste Storage Area-Authorized Personnel Only" or other similar legend which is visible at 25 feet?

7-309(7)(a)

Is a "No Smoking" sign posted for ignitable wastes in storage?

7-309(7)(b)

**Design Standards**

Impervious storage surface?

7-309(9)(a)

Structure to shed snow and ice?

7-309(9)(b)

Preventive measures for storage of freezable waste?

7-309(9)(d)

Are the containers in good condition?

7-309(5)(a)

Are the wastes stored in compatible containers?

7-309(5)(b)

Is there adequate aisle space (24" wide)?

7-309(8)(d)

Are containers not opened, handled or stored in a manner which may rupture the container or cause it to leak?

7-309(5)(c)(ii)

Are ignitable or reactive wastes located at least fifty (50) feet from the property line?

7-309(5)(c)(iii)

Are no incompatible wastes or incompatible wastes and materials placed into the same containers?

7-309(5)(c)(iv)(A)

Are no hazardous wastes placed in unwashed containers which previously held an incompatible waste or material?

7-309(5)(c)(iv)(B)

7-309(5)(c)(iv)(C)

Are hazardous wastes kept segregated from other incompatible wastes or materials?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(8)(c)

Are labels visible on all drums in storage?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-308(4)

Are containers clearly marked with:

Y\_\_\_ N\_\_\_ N/A\_\_\_

Generator name and address?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Identification number?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Name of waste?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Initial Accumulation date?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Required language (110 gallons or less)?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Comments:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**Pre-Transport Requirements**

Is the waste packaged in accordance to U.S. DOT Regulations?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-307(1)

Is all DOT labeling included?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-307(2)

Is the waste properly marked for shipment?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-307(3)

**Preparedness and Prevention**

Is the facility maintained in a manner to minimize the possibility of fire, explosion or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, groundwater, or surface water which could threaten human health or the environment?

7-309(2)

Y\_\_\_ N\_\_\_ N/A\_\_\_

Y\_\_\_ N\_\_\_ N/A\_\_\_

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(2)(a)(i)

Internal communication or alarm system?

Y\_\_\_ N\_\_\_ N/A\_\_\_

Y\_\_\_ N\_\_\_ N/A\_\_\_



7-309(2)(a)(11)

**Telephone or two-way radio capable of summoning emergency assistance?**

Y. N. N/A

7-309(2)(a)(11)

## Fire extinguisher and spill cleanup control equipment?

Y	N	N/A

7-309(2)(a)(iv)

## Water supply for fire-fighting or sprinkler/foam system?

Y\_\_\_\_ N\_\_\_\_ N/A\_\_\_\_

7-309(2)(b)

**Is all required equipment tested and maintained?**

Y	N	N/A

**7-309(2)(c)**

**Do employees handling hazardous waste have immediate access to a communication device or alarm system?**

Y\_\_\_\_\_ N/A\_\_\_\_\_

**Comments:**

## INVENTORY AND INSPECTION LOGS

7-309(1)(a)

Is a current hazardous waste inventory list maintained?

Y\_\_\_ N\_\_\_ N/A\_\_\_

7-309(1)(b)

**Is a daily inspection conducted and a checklist maintained for each storage area for the following:**

7-309(1)(b)(1)

### Condition of drums?

$$\frac{N}{N/A}$$

7-309(1)(b)(11)

## Safety and emergency equipment?

	N/A	N/A
Y		

7-309(1)(b)(11)

## Aisle space?

**N**\_\_\_\_\_ **N/A**\_\_\_\_\_

7-309(1)(b)(iv)

Problems encountered/corrective actions?

Y	N	N/A

7-309 (1) (b) (v)

Date of Inspection/Inspector's  
Signature?

**NY** **N** **N/A**

**Comments:**

**Request for Information**

**Photos Taken**

**Samples Taken (List sample numbers and describe technique)**

Potential for Imminent Hazard, Air, or Water Discharge Violations

Proximity to Residential Area, Surface Water, Recharge Zone, etc.

**BWS/at/inspect.1st  
December 30, 1993**

Please print or type with ELITE type (12 characters per inch) in the unshaded areas only

Please refer to the Instructions for Filing Notification before completing this form. The information requested here is required by law (Section 3010 of the Resource Conservation and Recovery Act).		<h2 style="margin: 0;">Notification of Regulated Waste Activity</h2> <p style="margin: 0;">United States Environmental Protection Agency</p>	Date Received (For Official Use Only)
<b>I. Installation's EPA ID Number (Mark 'X' in the appropriate box)</b>			
<input type="checkbox"/> A. First Notification <input type="checkbox"/> B. Subsequent Notification (complete item C)		C. Installation's EPA ID Number	
<b>II. Name of Installation (Include company and specific site name)</b>			
<b>III. Location of Installation (Physical address not P.O. Box or Route Number)</b>			
Street			
Street (continued)			
City or Town		State	ZIP Code
County Code	County Name		
<b>IV. Installation Mailing Address (See Instructions)</b>			
Street or P.O. Box			
City or Town		State	ZIP Code
<b>V. Installation Contact (Person to be contacted regarding waste activities at site)</b>			
Name (last)		(first)	
Job Title		Phone Number (area code and number)	
<b>VI. Installation Contact Address (See Instructions)</b>			
A. Contact Address Location     Mailing		B. Street or P.O. Box	
City or Town		State	ZIP Code
<b>VII. Ownership (See Instructions)</b>			
A. Name of Installation's Legal Owner			
Street, P.O. Box, or Route Number			
City or Town		State	ZIP Code
Phone Number (area code and number)		B. Land Type C-20	C. Owner Type
D. Change of Owner Indicator Yes   No		(Date Changed) Month   Day   Year	





Appendix D  
VERMONT AGENCY OF NATURAL RESOURCES  
HAZARDOUS MATERIALS MANAGEMENT

103 South Main Street  
Waterbury, Vermont 05671-0404  
802-244-8702

Please type (or print) (Form designed for use on electric typewriter)

FOR STATE USE ONLY

UNIFORM HAZARDOUS  
WASTE MANIFEST

Generator's US EPA ID No.

Manifest  
Document No.

2. Page 1  
of

Information in the shaded areas is not  
required by Federal law, but may be  
required by State law.

3. Generator's Name and Mailing Address (where returned manifests are managed)

A. State Manifest Document Number

VT 0067247

B. Generation Site (if different)

4. Generator's Phone ( )

5. Transporter 1 Company Name

6

US EPA ID Number

7. Transporter 2 Company Name

8

US EPA ID Number

9. Designated Facility Name and Site Address

10

US EPA ID Number

C. Trans. 1 Lic. St. Plate #

D. Trans. 1 Phone ( )

E. Trans. 2 Lic. St. Plate #

F. Trans. 2 Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone ( )

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

12. Containers

No.

Type

13. Total

Quantity

14. Unit

Wt/Vol

I. Waste No.

a.

b.

c.

d.

J. Additional Descriptions for Materials Listed Above

a.

c.

b.

d.

K. Handling Codes for Wastes Listed Above

Interim

Final

Interim

Final

a.

c.

b.

d.

15. Special Handling Instructions and Additional Information

Point of Departure or Entry - City, State

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State law and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment. OR if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name

Signature

Month Day Year

17. Transporter 1 Acknowledgement - Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

18. Transporter 2 Acknowledgement - Receipt of Materials

Printed/Typed Name

Signature

Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name

C-22

Signature

Month Day Year

COPY 1: FACILITY MAILED TO DESTINATION STATE

VT U061241



## VERMONT MANUFACTURER, INC.

## CONTINGENCY PLAN

## 1. GENERAL INFORMATION

Name: Vermont Manufacturer, Inc.

Location: P.O. Box 363, Rt #44

Windsor, VT 05089

Phone: (802) 123-4567

## EMERGENCY COORDINATORS:

## Primary:

John M. Smith  
18 Barker Hill  
Springfield, VT 05156  
Home Telephone: 802-085-1000  
Office Extension: 1111

## Alternate:

Howard S. Bantom  
P.O. Box 90  
Reading, VT 05062  
Home Telephone: 802-555-1234  
Office Extension: 2222

## Alternate:

Sally O. Jones  
RR #11, Box 333  
Reading, VT 05062  
Home Telephone: 802-555-2000  
Office Extension: 3333

Type of Facility: Processing of metal wire into paper clips

## 2. IMPLEMENTATION OF CONTINGENCY PLAN

This plan will be implemented if an incident threatens human life or the environment. The emergency coordinator has full authority to make this decision. Examples of such incidents are uncontrollable fire or spills, leaks, or overflows which may or may not be contained within the facility.

## 3. EMERGENCY RESPONSE PROCEDURE

Notification: Any employee discovering a fire or hazardous release must signal the facility personnel by either verbal or audible means. Telephones located in the mill area or the supervisors' office can be used to contact the Primary Emergency Coordinator.

If any emergency occurs during the second or third shift, the shift supervisor is responsible for contacting the Primary Emergency Coordinator (P.E.C.) at his home. In the event that the P.E.C. cannot be reached, an Alternate Emergency Coordinator must be contacted. Their phone numbers are listed in Section 1.

During any emergency, the P.E.C. and/or Alternate Coordinator(s) must be

present at the site. The P.E.C. will assess the severity of the situation so that the proper course of action can be taken. The P.E.C. will have the authority to spend whatever is necessary to carry out the contingency plan. During an absence of the P.E.C., the First Alternate Emergency Coordinator will carry out the contingency plan. In his absence, the Second Alternate Emergency Coordinator.

Whenever there is an imminent or actual emergency situation, the emergency coordinator (or his/her designee when the emergency coordinator is on call) must do the following immediately:

- (1) Activate internal facility alarms or communication systems;
- (2) Notify appropriate state or local agencies with designated response roles if their help is needed;
- (3) If a release has occurred, identify the source, character, amount and extent of any released materials by record review or chemical analysis;
- (4) Assess hazards to human health and the environment, considering all direct and indirect effects;
- (5) If the emergency coordinator determines that the facility has had a fire, explosion or release which could threaten human health or the environment outside the facility, she/he must:
  - (i) Determine if local evacuation may be necessary, and, if so, notify appropriate local authorities and be available to assist local authorities in evacuation measures; and
  - (ii) Notify the National Response Center (800-424-8802) and indicate his/her name and telephone number; name and address of the facility; time and type of incident; quantity of material(s) involved to the extent known; the extent of any injuries; and the possible hazards to human health or the environment outside the facility.
- (6) Take all reasonable measures necessary to ensure that fires, explosions and releases do not occur, recur, or spread to other hazardous waste at the facility. These measures must include, where applicable, stopping processes and operations, collecting and containing released waste, and removing or isolating containers;
- (7) If the facility stops operations in response to a fire, explosion or release, the emergency coordinator must monitor for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, wherever this is appropriate;
- (8) Immediately after an emergency, the emergency coordinator must provide for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that results from a release, fire or explosion at the facility; and
- (9) Ensure that in the affected areas of the facility, no waste that may be incompatible with the released material is stored until cleanup procedures are completed and all emergency equipment is cleaned and restored to a useable condition.

#### 4. EVACUATION PLAN

Facility personnel will be evacuated if the Emergency Coordinator decides that their personal safety is in danger. Immediately after the Primary Emergency Coordinator declares the evacuation of the facility, the Primary, or First Alternate Coordinator must notify the Fire Department and Hospital. A facility site plan indicating exits is attached.

An evacuation will be announced to employees by the Primary Emergency Coordinator. Routes and alternative routes are as follows:

Employees who may be in the wire bending thickener building would use either the East or West exits depending upon their proximity, and the location of the incident.

#### 5. NOTIFICATION OF FEDERAL, STATE, AND LOCAL AUTHORITIES

The Emergency Coordinator, after assessing the situation and implementing the contingency plan, will be responsible for the notification of the appropriate agencies listed below, as required.

- A. If threat of damage beyond facility exists:  
National Response Center, Washington, D.C.  
Telephone No. 800-424-8802
- B. If a spill may endanger ground or surface water:  
Environmental Protection Agency, Lexington, MA  
Telephone No. 617-223-7265
- C. The Vermont Agency of Environmental Conservation must be notified of any event which may result in implementation of the contingency plan.  
Vermont Agency of Environmental Conservation  
Telephone No. 802-241-3888  
24 Hr. Dispatcher No. 802-828-3100  
800-641-5005
- D. Windsor Ambulance Service.  
674-2112
- E. West Windsor Fire Dept.  
674-2121

#### 6. EMERGENCY EQUIPMENT

- A. Telephones are available for outside communications. Telephones are in the Office, mill area, and the laboratory.
- B. Sorbents are located in the wire bending building and in the hazardous waste storage area and should be used to contain liquid releases.

- C. A list of fire extinguishers and their location and type is attached.
- D. Water hoses are available in the small hydrant building on the East side of the wire bending building.
- E. Respirators are available in the warehouse.

#### 7. CONTINGENCY PLAN DISTRIBUTION

Copies of this contingency plan have been distributed to:

- A. Windsor Ambulance Service
- B. West Windsor Fire Department
- C. Mt. Ascutney Hospital & Health Center

**APPENDIX D**

**HAZARDOUS WASTE MANIFEST DESIGNATIONS AND SIGNATURE POLICIES**

The project manager should insert the training records and the formal written designation and authorization from the Division Commander for those individuals authorized to sign hazardous waste manifests at the project.





US Army Corps  
of Engineers

# Construction Bulletin

No. 93-6 Issuing Office: CEMP-CP Issue Date: 5/4/93 Exp. Date: 31 DEC 95

CEMP-C

Subject: Hazardous Waste Manifest Signature Policy and Procedures

Applicability: DIRECTIVE

## 1. REFERENCES.

- a. Construction Bulletin No. 91-13, 3 Jul 91, subject: Preparation and Signature of Hazardous Waste Manifests and Land Ban Certifications on EPA Superfund Projects.
- b. Construction Bulletin No. 91-21, 27 Nov 91, subject: Signature of Hazardous Waste Manifests for EPA Superfund Projects.
- c. Construction Bulletin No. 92-1, 29 Jan 92, subject: Asbestos Notification and Waste Shipment Record Requirements.
- d. ER 1180-1-6, Construction Quality Management, 1 Apr 91.
- e. ER 1110-1-263, Chemical Data Quality Management for Hazardous Waste Remedial Activities, 1 Oct 90.
- f. CEMP-RT memorandum dated 30 Apr 93, subject: Signatory Responsibility for Hazardous Waste Manifests and Related Documents - Policy Guidance.

## 2. PURPOSE.

This Construction Bulletin (CB) establishes policy regarding the signing of hazardous waste manifests and related documents. The Resource Conservation and Recovery Act (RCRA) addresses the "cradle to grave" management of hazardous waste. This includes the generation, storage, treatment, transportation and disposal of hazardous wastes. Implementing regulation (40 CFR 262) requires a generator who transports, or offers for transportation, hazardous waste for offsite treatment, storage, or disposal to prepare and sign a manifest which describes the hazardous waste in detail.

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SUBJECT: Hazardous Waste Manifest Signature Policy and Procedures

### 3. GENERAL.

With the exception of Corps owned facilities, USACE is not considered to be the owner of the hazardous waste it transports as part of the response activities. The customer agency is the generator for purposes of executing hazardous waste manifests. However, due to logistic complexities, a customer may not be able to provide an individual to sign the hazardous waste manifests in a timely manner. The customer may then request the Corps to sign project manifests on their behalf. (Federal regulations permit generators to have agents act on their behalf in signing the manifest forms). When an individual is signing on behalf of a generator which is a legal entity, such as a corporation or a company, the words "on behalf of" should be entered to indicate that the person signing the Generator's Certification is not necessarily accepting liability for violating the federal standards.

### 4. POLICY.

a. As the leader in DOD's full service environmental restoration efforts, USACE's role is expanding as a result of legislation, evolving missions, and customer needs. Commensurate with this role, it is USACE's goal to develop and implement practices that will facilitate the continuation of quality, comprehensive environmental services. In keeping with this goal, it is USACE's policy, if requested by its customers, to execute on behalf of those customers hazardous waste manifests and related documents. So far, two of our customers have requested USACE assistance in signing manifest forms on their behalf: the Environmental Protection Agency (EPA) and the Farmers Homes Administration. HQUSACE has accepted the delegated responsibility.

b. With regard to manifesting activities at sites where USACE is the owner or responsible agency, e.g., Civil Works facilities or Defense Environmental Restoration Program (DERP)-FUDS, manifest execution and related responsibilities will be performed by USACE.

c. With regard to DERP-Installation Restoration (IR) and Base Realignment and Closure (BRAC) environmental restoration activities, manifest execution and related responsibilities ordinarily belong to the customer (i.e., the installation or the base).

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In those instances where the additional cost of sending a qualified USACE representative to a remote location for a small project is unwarranted, the option of requiring the contractor to sign the manifests is permitted and should be considered. This option can only be exercised on a project specific basis after written authorization of the customer and approval of the Chief, Construction Division at the executing district. For FUDS projects, only the approval of the Chief, Construction Division at the executing district is necessary. In all cases, this requirement (of having the contractor sign the manifest) must be incorporated in the contract solicitation prior to contract award.

#### 5. PROCEDURES.

Where USACE personnel execute Uniform Hazardous Waste Manifest forms and related documents, procedures will be adopted by the operating divisions or districts as follows:

a. In the Generator's Name and Mailing Address box (block #3) on the Uniform Hazardous Waste Manifest form, Corps authorized personnel shall enter the following information: "Environmental Protection Agency/Superfund Program", "Farmers Homes Administration", or "DOD (DERP/FUDS)" as appropriate followed by "c/o" and then the name and address of the Corps office that manages the returned manifest forms. In the generator's certification box (block #16), the Corps employee would then sign his or her name, followed by "USACE" after writing or printing the phrase "On-behalf of the Environmental Protection Agency" or "On behalf-of the Farmers Homes Administration" as appropriate. On FUD sites, Corps personnel should follow the same procedure after typing or printing the phrase "On behalf-of the Department of Defense". All other manifest related documents executed by USACE members on behalf of a customer shall be executed by signature followed by USACE after writing or printing the phrase "on behalf of the (name of the customer)".

b. On Corps owned facilities where the Corps is a "generator" of hazardous wastes or is the "Responsible Party", Corps personnel shall enter in block #3 on the manifest form "U.S. Army Corps of Engineers", followed by the name and address of the Corps office that manages the returned manifest forms. In the generator's certification

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box (block #16), the Corps authorized employee would sign his or her name after typing or printing the phrase "On behalf of the U.S. Army Corps of Engineers".

c. Corps personnel authorized to execute manifest forms and related documents shall assure compliance with all reporting requirements (e.g., exceptions reports, biennial reports and state reports) as well as follow-on requirements, including the assembly and retention of all appropriate documentation and certifications.

d. Assure that USACE is authorized by its customers to execute hazardous waste manifests and related documents on their behalf before such documents are executed. This authorization is effected through an explicit provision in a Memorandum of Agreement, Inter-Agency Agreement, or correspondence signed by an appropriate agency official\* requesting and authorizing USACE to sign on their behalf. The customer request and authorization must acknowledge that the customer retains all responsibilities for the hazardous waste as a generator. This shall extend to the execution of the Hazardous Waste Manifests, Land Disposal Restriction Notification and Certifications, Waste Profile Sheets, and other forms necessary for the completion of manifests for transportation and disposal of hazardous waste. Approval to undertake the delegated responsibility of signing manifest forms and related documents rests with the chief of Construction Division at the executing district. If state statutes or regulations do not permit USACE to sign such documents on behalf of the customer, the Resident Engineer (RE) or other designated USACE representative is to contact the customer for further guidance.

e. All USACE members executing hazardous waste manifests and related documents must receive appropriate training before executing such documents. The minimum required training is specified in the following regulations:

\* HQUSACE Office of Counsel advised that EPA's letter of 18 Oct 90 (see reference 1a) requesting and authorizing USACE to execute and certify manifest forms and related documents on their behalf is legally sufficient and that no further documentation or individual project authorization is necessary.

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(1) Occupational Safety and Health Act (OSHA), 29 C.F.R. 1910-120;

(2) Resource Conservation and Recovery Act (RCRA), 40 C.F.R. 264.16 and 40 C.F.R. 265.16;

(3) Hazardous Transportation Uniform Safety Act (DOT), 49 C.F.R. 173.1; and May 15, 1992 Final Rule, Federal Register 49 C.F.R. 172.700 (Subpart H-Training); and

(4) Army Regulatory training requirements (AR 55-355).

Additional training may be required by operating divisions or districts. Training can be obtained from within or outside USACE. Regardless of the training source, it is the responsibility of the employing division or district to assure that the training is appropriate and that records of the members' successful completion of the training are appropriately maintained.

f. Only USACE members formally designated and authorized by a division or district commander/deputy commander shall be allowed to execute hazardous waste manifests and related documents. The formal designation and authorization must be in writing and state that the member is within his/her scope of employment when executing such documents.

g. Where USACE members are executing hazardous waste manifests and related documents, the contract under which the removal or remediation is being performed must contain supporting chemistry-related requirements and procedures. These items are imposed by the specifications and addressed by the contractor in a document known as the "Chemical Data Acquisition Plan" (see reference 1e). These plans are site specific guidance for sampling and analyses. They address, among other things, laboratory activities, chemical data documentation, equipment, sampling documentation, quality control, sample custody and shipment, analytical methods and document preparation. The project specific supplement to the QA Plan, developed by the Resident Engineer in accordance with reference 1d, must define the USACE quality assurance role in the manifesting process.

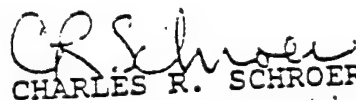
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h. It is intended that future contracts shall contain a requirement that hazardous waste manifests and related documents executed by USACE members be supported by contractor submittals prepared, reviewed, and approved by an authorized representative of the contractor. The contractor's employee shall also certify that packaging, labeling, marking and placarding of the waste meet all applicable federal and state regulations, and shall also certify as correct, Land Disposal Restriction Notifications and Certifications, Waste Profile Sheets, and related documents before providing the documents to USACE.

6. To implement the above policy and procedures, HQUSACE (with MRD MCX support) is defining the responsibility of and the course of action to be followed by all parties involved, i.e., HTRW design districts, executing districts and contractors. A complete hazardous waste transportation and disposal check list will be developed for contractors to complete as part of the submittal process. For your information, the Engineer Manual on manifesting is projected to be complete by end of this fiscal year. Previously issued CB's provided you with recommended training sources, Hot Lines, and videotape libraries to assist you in accomplishing your mission.

7. This CB has been coordinated with HQUSACE's Environmental Restoration Division (CEMP-R); Engineering Division (CEMP-E); Office of the Chief Counsel (CECC-C); Office of the Principal Assistant Responsible for Contracting (CEPR-ZA); and, Operations, Construction and Readiness Division, Directorate of Civil Works (CECW-OC).

  
CHARLES R. SCHROER

Chief, Construction Division

25 AUG 1993

CECW-OA

MEMORANDUM FOR SEE DISTRIBUTION

SUBJECT: Hazardous Waste Manifest Signature Policies and Procedures

1. References:

- a. Department of Transportation Regulation 49 CFR 172.700 (Subpart H-Training).
- b. Construction Bulletin 93-6, subject as above (enclosed).

2. It is Civil Works and Military Programs policy with regard to manifesting activities at sites where the U.S. Army Corps of Engineers is the owner or responsible agency, that manifest execution and related responsibilities will be performed by the Corps.

3. Department of Transportation regulation 49 CFR 172.700 (Subpart H-Training) requires training employees who load, unload, or handle hazardous materials for transportation, assure the safety of a shipment, or operate a motor vehicle used to transport hazardous materials.

4. Construction Bulletin 93-6, paragraph 5e., requires that all Corps members "executing" hazardous waste manifests and related documents must receive appropriate training before executing such documents. Completion of training is required by 1 October 1993, for employees employed on or before 2 July 1993.

5. Only Corps members formally designated and authorized by a division or district commander/deputy commander shall be allowed to execute hazardous waste manifests and related documents. The formal designation and authorization must be in writing and state that the member is within his/her scope of employment when executing such documents.

CECW-OA

SUBJECT: Hazardous Waste Manifest Signature Policies and  
Policies

6. Headquarters point of contact is Jim Wolcott (CECW-OA), at  
(202)272-1152.

ENCL

5  
JOHN P. ELMORE, P.E.  
Chief, Operations, Construction,  
and Readiness Division  
Directorate of Civil Works



**APPENDIX E**

**RECYCLING INFORMATION**

# **Markets and Special Services Directory for Reusable and Recyclable Materials**

(Seventh Edition - February 1996)



Vermont Agency of Natural Resources  
Department of Environmental Conservation  
Environmental Assistance Division  
103 South Main Street  
Waterbury, VT 05671-0411

1-800-932-7100 (in Vermont)  
(802) 241-3589

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## **A. INTRODUCTION**

This directory has been prepared to assist community groups, businesses, municipalities and solid waste districts in identifying markets and services for reusable and recyclable materials. While the directory provides some basic information on freight arrangements, and market specifications, it would be best for you to contact each potential market before you attempt to collect or sell any recyclable material. We encourage you to contact a number of companies to compare market arrangements and prices so that you can get the best deal for your facility. The NATIONAL AND STATE ORGANIZATIONS section provides additional information on reuse and recycling markets. You may also want to check on the end-use for the material since that information is not included in this Directory.

The markets guide can help you "Close the Loop" by listing directories with information on recycled content products. We encourage the purchase of recycled paper that is manufactured without the use of chlorine or chlorine derivatives as bleaching agents.<sup>1</sup> For more information on the variety of chlorine-free recycled paper available and where to get samples, and to learn more about buying other recycled products, call the Recycling Hotline.

The directory contains a categorical materials index which lists the state that the business is located in. The categorical materials index will assist you in identifying brokers, processors or end users of a particular material. The profiles of end users, processors, and brokers are listed alphabetically. Refer to the Special Services Section for information on reuse opportunities, other recycling services, recycling directories and organizations, and listings for your local recycling coordinator.

For more information on recycling:

- Vermont Recycling Hotline: 1-800-932-7100.

For information on Pollution Prevention:

- Vermont Pollution Prevention: 1-800-974-9559

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<sup>1</sup> Cover is printed on 100% post-consumer recycled, unbleached paper.  
Text is printed on 100% recycled (50% post-consumer), unbleached paper.

## B. MATERIALS LISTED IN THIS DIRECTORY

This directory identifies markets for the following recyclable materials:

### Aluminum

Aluminum

### Batteries

Lead-acid Batteries

### C&D

Asphalt

Asphalt Shingles

Brick

C&D

Clean Wood Waste

Concrete

Gypsum

Railroad Ties

Sheet Rock

Stumps

Stumps, other tree parts

Telephone Poles

### Compostable Materials

Food Waste

Yard Waste

### Gable Top

Gable Top/Drink Boxes

Milk Cartons

### Glass

### Oil

### Other

### Pallets

### Paper

Blueprints

Boxboard

Brown Grocery Bags

Cardboard

Colored Ledger

Computer Print-out

Cores

Corrugated Cardboard

Hardcover Books

Magazines

Mixed Paper

### Paper (cont.)

Newspaper

Other Paper

Telephone Books

Waxed Cardboard

White Ledger

Wirebound Boxes

### Plastic

Greenhouse Film

Grocery Sacks

HDPE Plastic Containers

LDPE Plastic

Molded Flower Pots

Mulch Film

Other Plastic

Overwintering Film

PETE Plastic Containers

PP Plastic (polypropylene)

PS Plastic (polystyrene)

PVC Plastic (polyvinylchloride)

Plastic Bags

Plastic Film

Polyurethane

Resins 1 - 7

Shrink Wrap

Silage Bags

Stretch Film

Urethane Foam

### Rendering

Grease

Meat and Bone Scraps

### Reusable Items

### Scrap Metal

White Goods

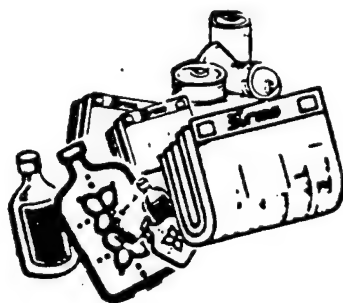
### Steel Cans

### Textiles

Clean Clothes

Clean Rags

### Tires



## **C: CATEGORICAL MATERIALS INDEX**

### **Aluminum**

Acme Metals and Recycling Inc. (MA)  
Advanced Recycling (NH)  
Alcoa Recycling Co. Inc. (NJ)  
Casella Waste Management (VT)  
Chittenden Recycling Services (VT)  
Conigliaro Industries Inc. (MA)  
Goodman Recycling, Div. of WMI (MA)  
Hardwick Recycling and Salvage (VT)  
Hodgdon Brothers (VT)  
Janci Metal Recycling (NH)  
Jewell Resources, Inc. (NH)  
Manchester Recycling Corp. (NH)  
Northeast Kingdom SWMD (VT)  
Northeast Waste Services, LTD (VT)  
P. Allen and Son, Inc. (MA)  
Pinetree Waste Corp. (NH)  
Recycle America/RRT (MA)  
Recycling Services (NH)  
Reynolds Aluminum Recycling (CT)  
Rutland County MRF (VT)  
Rutland Storage Trailers Inc. (VT)  
Superior Recycling (NH)  
Waste Mgt. of Eastern New York (NY)  
Windham SWMD (VT)

### **Batteries**

Consolidated Recycling (PQ)  
Hodgdon Brothers (VT)  
Hodgdon Brothers Recycling (VT)  
Janci Metal Recycling (NH)  
Manchester Recycling Corp. (NH)  
Pinetree Waste Corp. (NH)  
Recycling Services (NH)

### **Construction Waste and Demolition Debris (C&D)**

A. Marcelino and Company Inc. (VT)  
All Cycle Waste Inc. (VT)  
American Reclamation Corp. (MA)  
BROX Industries (NH)  
BROX Industries (MA)  
Chittenden Wood & Yard Waste (VT)  
Commercial Paving Systems (ME)  
DeCato Sand and Gravel (NH)  
Domtar Gypsum (NH)  
Environmental Resource Return (NH)  
Hardwick Recycling and Salvage (VT)  
King Road Materials (NY)  
M-R Land Excavation, Inc. (NH)  
Pike Industries (NH)

### **C&D (cont.)**

Rutland County MRF (VT)  
Rutland Storage Trailers Inc. (VT)  
Wood Recycling Inc. (MA)

### **Compostable Materials**

Intervale Foundation (VT)

### **Gable Top**

Casella Waste Management (VT)  
Chittenden Recycling Services (VT)  
Northeast Kingdom SWMD (VT)

### **Glass**

Anchor Glass Container (CT)  
All Cycle Waste Inc. (VT)  
Casella Waste Management (VT)  
Chittenden Recycling Services (VT)  
Conigliaro Industries Inc. (MA)  
Consumers Glass (ON)  
Fenwick Paper Brokerage (VT)  
Foster-Forbes Glass Co. (MA)  
Hardwick Recycling and Salvage (VT)  
King Road Materials (NY)  
Northeast Kingdom SWMD (VT)  
Northeast Waste Services, LTD (VT)  
Orford Recycling, Inc. (PQ)  
Owens-Brockway Glass Inc. (OH)  
Pennsylvania Cullet (PA)  
Recycle America/RRT (MA)  
Recycling Services (NH)  
Rutland County MRF (VT)  
Rutland Storage Trailers Inc. (VT)  
Waste Mgt. of Eastern New York (NY)  
Windham SWMD (VT)

### **Other**

American Reclamation Corp. (MA)  
Baker Commodities (VT)  
Recycling Services (NH)  
Reynolds Aluminum Recycling (CT)

### **Pallets**

All Cycle Waste Inc. (VT)  
Dom's Empty Package Supply (NY)  
M-R Land Excavation, Inc. (NH)  
Pallets Recycle of Vermont (VT)  
Rutland County MRF (VT)

**Paper**

Robert Stuart (VT)  
A. Shapiro and Sons (MA)  
APC Paper Company (NH)  
Acme Metals and Recycling Inc. (MA)  
All Cycle Waste Inc. (VT)  
American Paper Recycling Co. (VT)  
Bonded Insulation Co., Inc. (NY)  
Canusa Corporation (VT)  
Cascades Recycling Inc. (QUE)  
Casella Waste Management (VT)  
Chittenden Recycling Services (VT)  
Conigliaro Industries Inc. (MA)  
Dom's Empty Package Supply (NY)  
Domtar Packaging, Recyc. Div. (ON)  
Encore Paper (NY)  
Fenwick Paper Brokerage (VT)  
Fort Orange Paper Co. (NY)  
G.E. Robertson & Co. (NH)  
Goodman Recycling, Div. of WMI (MA)  
Hanna Paper Recycling Co. (MA)  
Hardwick Recycling and Salvage (VT)  
J. Schwartz Motor Transport. (NH)  
Manchester Recycling Corp. (NH)  
Marolf Enterprises Inc. (VT)  
National Fiber Inc. (MA)  
New England Processing (ME)  
North Shore Recycled Fiber (MA)  
Northeast Kingdom SWMD (VT)  
Northeast Waste Services, LTD (VT)  
Orford Recycling, Inc. (PQ)  
P. Allen and Son, Inc. (MA)  
Paper Services Ltd. (NH)  
Paperboard Industries Corp. (ON)  
Papier Kinsey Fall/Cascade Div (PQ)  
Penacook Fiber Company (NH)  
Pinetree Waste Corp. (NH)  
Pinetree Waste Corp. (NH)  
Putney Paper Co., Inc. (VT)  
QUNO Corporation (ON)  
Recycle America/RRT (MA)  
Recycling Services (NH)  
Rock-Tenn Company (VT)  
Rutland County MRF (VT)  
Rutland Storage Trailers Inc. (VT)  
Sonoco Limited (PQ)  
Sonoco Paper Recovery ()  
Specialty Paperboard, Inc. (VT)  
St. Laurent Paperboard Inc. (ON)  
Strathcona Paper Co. (ON)  
Sunoco Products Co. (MA)  
Superior Recycling (NH)  
Tenneco Packaging (NY)

**Paper (cont.)**

Thermo-cell Insulation Ltd. (ON)  
Waste Mgt. of Eastern New York (NY)  
Wellington Hill Recycling Co. (VT)  
William Goodman and Sons (MA)  
Windham SWMD (VT)  
Wood Recycling Inc. (MA)

**Plastic**

Atlantic Poly Inc. (MA)  
Casella Waste Management (VT)  
Chittenden Recycling Services (VT)  
Conigliaro Industries Inc. (MA)  
Enviro Tech (MA)  
Fiber Conversion, Inc. (NY)  
Free Flow Packaging Corp. (DE)  
Gianco Ltd. (NY)  
Hafner Industries, Inc. (CT)  
Hardwick Recycling and Salvage (VT)  
Ingenuity Corporation (VT)  
Jalisson Transplastek Inc. (PQ)  
KJ Plastics (PA)  
Mobil Chemical Company (VA)  
Nat. Polystyrene Recycling Co (NJ)  
New England Processing (ME)  
Niagra Resin and Recycling (NY)  
Nicon Plastics, Inc. (NY)  
North Shore Recycled Fiber (MA)  
Northeast Kingdom SWMD (VT)  
Northeast Waste Services, LTD (VT)  
Obex Inc. (CT)  
Orford Recycling, Inc. (PQ)  
P. Allen and Son, Inc. (MA)  
Polychem Products Ltd. (QC)  
Pure Tech International, Inc. (NY)  
Recoverable Resources/R2B2 (NY)  
Recycle America/RRT (MA)  
Recycling Services (NH)  
Rutland County MRF (VT)  
Rutland Storage Trailers Inc. (VT)  
Shuman Plastics (NY)  
St. Jude Polymers Corp. (PA)  
Tenneco Packaging (NY)  
U.S. Polymers, Inc (MA)  
United Resource Recvry-Hancor (VT)  
Vermont Republic Industries (VT)  
WTE Recycling (NY)  
Waste Mgt. of Eastern New York (NY)  
Wellington Hill Recycling Co. (VT)  
Wellman, Inc. (NJ)  
Windham SWMD (VT)



## Rendering

Baker Commodities (VT)

## Scrap Metal

A. Shapiro and Sons (MA)  
Acme Metals and Recycling Inc. (MA)  
Advanced Recycling (NH)  
All Cycle Waste Inc. (VT)  
Casella Waste Management (VT)  
Conigliaro Industries Inc. (MA)  
Consolidated Recycling (PQ)  
Fenwick Paper Brokerage (VT)  
Freedman & Son Inc. (NY)  
Hardwick Recycling and Salvage (VT)  
Hodgdon Brothers (VT)  
Hodgdon Brothers Recycling (VT)  
Janci Metal Recycling (NH)  
Jewell Resources, Inc. (NH)  
Manchester Recycling Corp. (NH)  
Pinetree Waste Corp. (NH)  
R&R Industries, Inc. (MA)  
Recycling Services (NH)  
Rutland Storage Trailers Inc. (VT)  
Schiavone Brothers Inc. (MA)

## Steel Cans

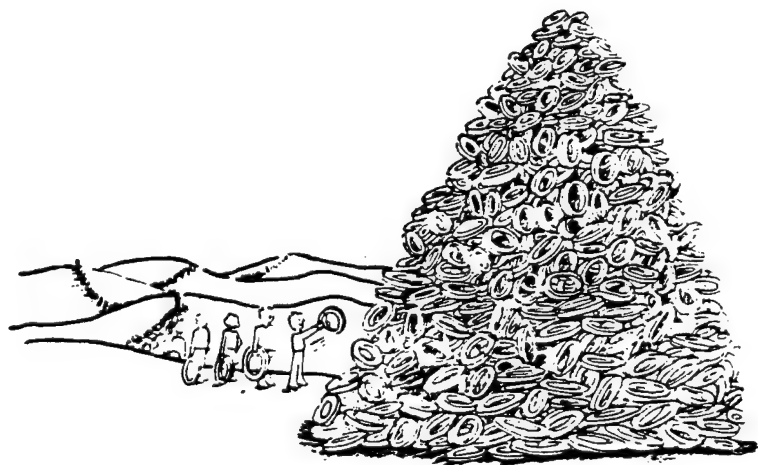
Advanced Recycling (NH)  
All Cycle Waste Inc. (MA)  
Casella Waste Management (VT)  
Chittenden Recycling Services (VT)  
Conigliaro Industries Inc. (MA)  
Fenwick Paper Brokerage (VT)  
Freedman & Son Inc. (NY)  
Hodgdon Brothers Recycling (VT)  
Janci Metal Recycling (NH)  
Jewell Resources, Inc. (NH)  
Northeast Kingdom SWMD (VT)  
Northeast Waste Services, LTD (VT)  
Orford Recycling, Inc. (PQ)  
P. Allen and Son, Inc. (MA)  
Recycle America/RRT (MA)  
Recycling Services (NH)  
Rutland County MRF (VT)  
Rutland Storage Trailers Inc. (VT)  
Waste Mgt. of Eastern New York (NY)  
Windham SWMD (VT)

## Textiles

A. Shapiro and Sons (MA)  
All Cycle Waste Inc. (VT)  
Albert E. Silberman & Co., Inc (OH)  
Casella Waste Management (VT)  
Chittenden Recycling Services (VT)  
Copnick Corp. (PQ)  
Cynamon Textile Co. (NY)  
Dumont Export Corporation (PA)  
E. Butterworth & Co., Inc. (MA)  
Fenwick Paper Brokerage (VT)  
Fiber Conversion, Inc. (NY)  
Josh Trading Co./Sara Glove Co (CT)  
Northeast Kingdom SWMD (VT)  
Pinetree Waste Corp. (NH)  
Rutland County MRF (VT)  
Sunrise Trading Corp. (NJ)  
Trans-Americas Trading Co. (NY)  
WF Trading Company (VT)

## Tires

Burlington Tire Removal (VT)  
Hodgdon Brothers (VT)  
J.P. Routhier and Sons Inc. (MA)  
Janci Metal Recycling (NH)  
Jewell Resources, Inc. (NH)  
Oxford Tire Supply, Inc. (CT)  
Palmer Shredding, Inc. (VT)  
R&R Industries, Inc. (MA)



## **D. SOME KEY CONSIDERATIONS WHEN CONTACTING MARKETS**

The following considerations are essential when you contact companies about marketing your materials. the following information is vital.

### **1) Market Specifications**

Quality is the most important factor determining the prices you will receive for your materials. In general, the higher the quality - the higher the price you will receive. Each market has purchasing requirements or specifications unique to a particular material. These specifications explain to what extent contaminants are allowed to be mixed with recyclables.

It is important to investigate the specifications of all potential markets before you start collecting materials to determine whether or not you can meet the requirements. As a general rule, it is best to collect your materials with as few contaminants as possible to allow for the widest choice of markets.

Operating procedures at your recycling collection center should incorporate quality control provisions which assure that market specification requirements can be met, (e.g. supervision during operating hours and locked containers during non-operating hours). While higher quality materials receive higher prices, they also require greater quality control provisions and potentially greater collection costs. Quality control provisions minimize the possibility of contaminated loads, i.e. loads that are rejected by your market because they fail to meet minimum specifications. If materials cannot be marketed, they may have to be disposed of as solid waste.

Market specifications can also include requirements on how materials need to be prepared (baled, crushed, loose, etc.) This will determine what processing equipment you may need. These requirements can be very specific, such as different bale sizes and weight limitations for different materials, granulated or shredding sizes for plastics, etc.

### **2) Contracts**

A contract can help to minimize your risks by guaranteeing markets despite fluctuations in market demand. Conversely, a contract will also lock your program into a set price for the contract's duration. Some companies may not offer long-term contracts (one year or more), particularly secondary markets such as brokers or processors. After prospective markets are identified, the next step, if available, is to secure firm commitments from each market in the form of either a letter of intent, a letter of agreement, a contract or a purchase order. Be sure to shop around for the most favorable contractual arrangements.

The following provisions should be considered for inclusion in a market contract:

- (a) Description of material type(s) and grade(s);
- (b) Delivery arrangements, including size (minimum or maximum tonnages) and frequency of shipments;
- (c) Materials specifications guidelines, including acceptable contamination levels and form required;
- (d) Duration of the contract;
- (e) Non-performance penalties (if program fails to deliver tonnage or quality promised in the contract - this is to the buyers advantage);
- (f) Price-setting mechanism;
- (g) Services to be provided by the market (transportation, storage);
- (h) Any special terms and conditions.

### 3) Marketing Services

Certain companies may be willing to provide a variety of services for your program. Some will lease or provide free-of-charge storage containers, while a few others may lease processing equipment, such as balers or compactors. However, the provision of these marketing services is contingent upon the ability of a program to collect large amounts of good quality recyclables on a regular basis.

This directory classifies each company under the categories of broker, processor, or hauler. **Brokers** may be involved in transporting, storing and handling of materials - and are most likely to provide a variety of services, including container leasing and transportation services. **Processors**, which are often times brokers as well, prepare materials for delivery to markets, including sorting, baling, crushing and shredding. **End-users** are companies that use recycled materials to produce a new product, yet may also provide a variety of market services.

Shipping directly to end-use markets may require meeting greater processing requirements and reaching greater tonnage levels, yet end-users often provide a higher price for materials. You may want to consider working through local brokers and processors until you can learn the "ins and outs" of specific markets.

### 4) Freight

Transportation represents one of the most significant costs in operating a collection facility. A variety of freight arrangements exist and merit consideration in deciding how to get materials to market. This directory usually identifies whether a company accepts materials Free-on -Board (FOB) their dock or the shipper's dock. FOB refers to the point at which transfer of ownership of materials occurs, and consequently, whether you or the buyer will pay the freight costs. For example, "FOB your dock" means the buyer will accept responsibility for the materials at your facility, and the price quoted for materials includes freight costs. Conversely, "FOB their dock" infers that you are responsible for transporting the materials to the market. Some markets are willing to negotiate freight arrangements. For example, some markets may be able to arrange transportation and deduct these costs from the quoted price of the materials.

If a market is able to provide transportation services, they will usually require a minimum load - either prescribed in tonnage or full truck or trailer load.

### 5) Prices

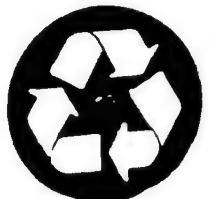
Prices are not listed in the entries within this directory. Many companies are uncomfortable offering prices over the phone and prefer to do so only in a letter. Prices change often and vary within the markets. Be sure to shop around for the best price.

## E. FINAL NOTES

The Department of Environmental Conservation plans to regularly update this directory to reflect changing market situations. We encourage you to keep us updated on your successes as well as problems that you encounter with specific markets, as we are trying to improve market conditions in Vermont.

Please contact the Recycling Section if you have any questions or updated information regarding your marketing operation.

Good Luck!



## F. PROFILES OF PROCESSORS, BROKERS AND END-USERS

Contact: Robert Stuart  
Address: River Cove Road  
Williston VT 05495  
Phone: 802-879-7287

Category: Broker

Freight:  
Form:  
Quantity:  
Assistance: Will pick up

### Materials Accepted:

Hardcover Books  
Magazines

---

#### A. Marcelino and Company Inc.

Contact: Alan Marcelino  
Address: PO Box 195  
Williston VT 05495  
Phone: 800-499-6383

Category: Processor, End-user, Broker

Freight:  
Form:  
Quantity:  
Assistance:

### Materials Accepted:

Asphalt  
Brick  
Concrete

---

#### A. Shapiro and Sons

Contact: Mr. Shapiro  
Address: P.O. Box 711  
N. Adams MA 01247  
Phone: 413-663-6525

Category: Broker, Processor

Freight: Pick-up available.  
Form: prefer baled or boxed  
Quantity: truck load  
Assistance:

### Materials Accepted:

Boxboard  
Computer Print-out  
Corrugated Cardboard  
Newspaper  
White Ledger  
Scrap Metal  
White Goods  
Clean Rags  
Textiles

---

#### APC Paper Company

Contact: Bud Edwards  
Address: P.O. Box 827  
Claremont NH 03743  
Phone: 603-542-0411

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

### Materials Accepted:

Brown Grocery Bags  
Corrugated Cardboard

---

#### Acme Metals and Recycling Inc.

Contact: George Sachs  
Address: P.O. Box 3218  
Springfield MA 01101  
Phone: 800-479-3155

Category: Broker, Processor

Freight: They can arrange trucking. FOB their dock.  
Form: Whole  
Quantity:  
Assistance: Rent trailers & containers

### Materials Accepted:

Aluminum  
Computer Print-out  
Corrugated Cardboard  
Mixed Paper  
Other Paper  
White Ledger  
Scrap Metal

---

**Advanced Recycling**

Contact: Spencer Bennett  
Address: 25 Sandquist Street  
Concord NH 03301  
Phone: 800-227-3911

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Aluminum  
Scrap Metal  
White Goods  
Steel Cans

---

**Albert E. Silberman & Co., Inc**

Contact: Lyn Silberman  
Address: 4435 Emery Indst.Pwk  
Cleveland OH 44128  
Phone: 216-464-7550

Category: Broker

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Textiles

---

**Alcoa Recycling Co. Inc.**

Contact: Beth Lanning  
Address: 1815 Front Street  
Scotch Plains NJ 07076  
Phone: 908-322-5588

Category: End-user

Freight: FOB their dock. Can arrange for trucking.  
Form: Loose/flat/baled/densifie  
Quantity: Truckload amt. for pickup  
Assistance: Can lease equipment

Materials Accepted:

Aluminum

---

**All Cycle Waste Inc.**

Contact: Joe Winters  
Address: P.O. Box 976, Ave B  
Williston VT 05495  
Phone: 802-864-6975

Category: Processor

Freight: Trucking available  
Form:  
Quantity: no minimum  
Assistance:

Materials Accepted:

Aluminum  
Asphalt, Asphalt Shingles  
Brick  
CED  
Clean Wood Waste  
Concrete  
Gypsum, Sheet Rock  
Stumps  
Pallets  
Glass  
Boxboard  
Computer Print-out  
Colored Ledger  
Corrugated Cardboard  
Magazines  
Mixed Paper  
Newspaper  
White Ledger  
Scrap Metal  
Textiles  
Steel Cans

Scrap Metal  
Scrap Metal

Scrap Metal



---

**American Paper Recycling Co.**

Contact: Kevin Gardiner  
Address: P.O. Box 9481  
S. Burlington VT 05407  
  
Phone: 802-863-9109

Category: Broker, Processor

Freight: Free pick-up for 1 or more tons  
Form: loose or baled  
Quantity: Burlington area 1 ton min  
Assistance: Trailers avail for trailer load amt

Materials Accepted:

Colored Ledger  
Computer Print-out  
Magazines  
Other Paper  
White Ledger

---

**American Reclamation Corp.**

Contact: Bill McCambridge  
Address: PO Box 653  
Charlton MA 01508  
  
Phone: 508-248-3777

Category: Processor, End-user

Freight:  
Form:  
Quantity:  
Assistance: Will recycle on-site

Materials Accepted:

Asphalt  
Brick  
Concrete  
Other

---

**Anchor Glass Container**

Contact: Harry Bautista  
Address: Route 101, PO 757  
Dayville CT 06241  
  
Phone: 203-774-9636

Category: End-user

Freight: FOB their plant  
Form: crushed/roll-offs/trailer  
Quantity: prefer full truck loads

Materials Accepted:

Glass

---

**Atlantic Poly Inc.**

Contact: John Maslowski  
Address: 670 Canton Street  
Norwood MA 02062  
  
Phone: 800-225-9892

Category:

Freight:  
Form: Baled (850 lb. bales min)  
Quantity: Min. of 20,000 pounds  
Assistance:

Materials Accepted:

Plastic Bags  
Stretch Film

---

**BROX Industries**

Contact: Erik Stevenson  
Address: 85 Greeley Street  
Hudson NH 03051  
  
Phone: 508-454-9105

Category: Processor, End-user

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Asphalt  
Concrete

---

**BROX Industries**

Contact: Erik Stevenson  
Address: 1471 Methuen St.  
Dracut MA 01826  
  
Phone: 508-454-9105

Category: Processor, End-user

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Asphalt  
Stumps, other tree parts

---

**BROX Industries**

Contact: Erik Stevenson

Address:

Milford

NH

Phone: 508-454-9105

Category: Processor, End-user

Freight:

Form:

Quantity:

Assistance: Other NH site located in Hookset, NH

Materials Accepted:Asphalt

---

**BROX Industries**

Contact: Erik Stevenson

Address:

Marlborough

MA

Phone: 508-454-9105

Category: Processor, End-user

Freight:

Form:

Quantity:

Assistance: Other MA sites in Ipswich &amp; Merrimac

Materials Accepted:Asphalt

---

**Baker Commodities**

Contact: David King

Address: Avenue-B, Griswald Pk

Williston

VT 05495

Phone: 802-658-0721

Category: End-user

Freight:

Form: Drums or tanks

Quantity:

Assistance:

Materials Accepted:

Other

Grease

Meat and Bone Scraps



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**Bonded Insulation Co., Inc.**

Contact: C.D. Chittenden  
Address: 78 N. Pawling Street  
Hagaman NY 12086  
Phone: 518-842-1470

Category: End-user

Freight:  
Form: baled or loose  
Quantity: 15 - 20 tons/load  
Assistance:

Materials Accepted:

Newspaper

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**Burlington Tire Removal**

Contact:  
Address: 25 St. Mary Street  
Burlington VT 05495  
Phone: 802-862-8610

Category:

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Tires

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**Canusa Corporation**

Contact: Dave Knight  
Address: P.O. Box 1237  
St. Albans VT 05478  
Phone: 802-527-1707

Category: Broker, Processor

Freight: No Pick-up  
Form: Baled/loose/gaylords/box  
Quantity: no minimum  
Assistance: baler placement

Materials Accepted:

Boxboard  
Colored Ledger  
Corrugated Cardboard  
Magazines  
Newspaper  
Other Paper  
White Ledger

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**Cascades Recycling Inc.**

Contact: Rina McGuire  
Address: 63 St. Josephs Blvd.  
Lachine QUE H8S 2K9 Canada  
Phone: 513-363-9118

Category: End-user

Freight: FOB their dock. Can arrange trucking.  
Form: Baled preferred.  
Quantity: 20 ton  
Assistance:

Materials Accepted:

Colored Ledger  
Computer Print-out  
Cores  
Corrugated Cardboard  
Newspaper  
Telephone Books  
White Ledger





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Casella Waste Management

Contact: Bob Perry  
Address: 175 Lakeside Ave  
Burlington VT 05401  
Phone: 802-862-1900

Category: Broker, Processor

Freight: They can pick-up or accept deliveries.  
Form: any form  
Quantity: no minimum  
Assistance: containers leased, education/train

Materials Accepted:

Aluminum  
Gable Top/Drink Boxes  
Glass  
Boxboard  
Computer Print-out  
Corrugated Cardboard  
Magazines  
Mixed Paper  
Newspaper  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
PS Plastic  
Scrap Metal  
Steel Cans  
Textiles

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Casella Waste Management

Contact: Tim French  
Address: Smith Street  
Rutland VT 05701  
Phone: 802-775-9908

Category: Broker, Processor

Freight: they can pick up or accept deliveries  
Form: any form  
Quantity: no minimum  
Assistance: containers leased, education

Materials Accepted:

Aluminum  
Gable Top/Drink Boxes  
Glass  
Computer Print-out  
Corrugated Cardboard  
Mixed Paper  
Newspaper  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
PS Plastic  
Scrap Metal  
Steel Cans  
Textiles

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Casella Waste Management

Contact: Lenny Wing  
Address: P.O. Box 548  
Montpelier VT 05601  
Phone: 802-223-7045

Category: Broker, Processor

Freight: they can pick up or deliver  
Form: negotiable  
Quantity: no minimum  
Assistance: containers leased

Materials Accepted:

Aluminum  
Gable Top/Drink Boxes  
Glass  
Computer Print-out  
Corrugated Cardboard  
Mixed Paper  
Newspaper  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
PS Plastic  
Scrap Metal  
Steel Cans  
Textiles

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**Chittenden Recycling Services**

Contact: John Hulme  
Address: 65 Ave. C  
Williston VT 05495  
Phone: 802-658-5176

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Aluminum  
Gable Top/Drink Boxes  
Glass  
Brown Grocery Bags  
Cardboard  
Colored Ledger  
Computer Print-out  
Hardcover Books  
Magazines  
Mixed Paper  
Newspaper  
Telephone Books  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
PS Plastic  
Steel Cans  
Textiles

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**Chittenden Wood & Yard Waste**

Contact: Recycling Hotline  
Address: Burlington VT 05495  
Phone: 802-872-8111

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Clean Wood Waste

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**Commercial Paving Systems**

Contact: Tom Kane  
Address: 2 Gibson Road  
Scarborough ME 04074  
Phone: 207-883-3325

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Asphalt  
Asphalt Shingles  
Brick  
Sheet Rock

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**Conigliaro Industries Inc.**

Contact: Greg Conigliaro  
Address: 710 Waverly St.  
Framingham MA 01701  
Phone: 508-872-9668

Category: Processor

Freight: Can pick-up  
Form: Loose/baled/granulated  
Quantity: no minimum  
Materials Accepted:

Aluminum  
Glass  
Corrugated Cardboard  
Newspaper  
White Ledger  
HDPE Plastic Containers  
LDPE Plastic  
Other Plastic  
PETE Plastic Containers  
PP Plastic  
PS Plastic  
PVC Plastic  
Plastic Film  
White Goods  
Steel Cans

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**Consolidated Recycling**

Contact: Jeff Solomon  
Address: P.O. Box 59  
St. Catherine

PQ JOL 1E0 Canada

Phone: 514-638-1732

Category: Processor

Freight:  
Form:  
Quantity: Minimum for pick-up  
Assistance: On-site baler.

Materials Accepted:

Lead-acid Batteries  
Scrap Metal  
White Goods

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**Consumers Glass**

Contact: Joe Paridiso  
Address: 777 Kipling Ave.  
Toronto

ON M8Z 5G6 Canada

Phone: 416-232-3603

Category: End-user

Freight:  
Form: Uncrushed preferred  
Quantity: Truck load  
Assistance: (plants in Montreal & Toronto area)

Materials Accepted:

Glass

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**Copnick Corp.**

Contact: Alvin Berger  
Address: 6198 Notre Dame West  
Montreal

PQ H4C 1V4 Canada

Phone: 514-937-9306

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Textiles

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**Cynamon Textiles Co.**

Contact: Scott Cynamon  
Address: Box 716  
Hartsdale, NY 10530

Phone: 914-472-4922

Category: Processor

Freight: Over the road and container trucks  
Form:  
Quantity: 1/2 and full trailer loads  
Assistance: Free program set up and development

Materials Accepted:

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**Textiles****DeCato Sand and Gravel**

Contact: Rodger DeCato  
Address: Chichester Road  
London

NH 03301

Phone: 603-798-5452

Category: Processor, End-user

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Asphalt  
Brick  
Concrete

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**Dom's Empty Package Supply**

Contact: Jim or Kay Badami  
Address: 87 S. Ohioville Road  
New Paltz

NY 12561

Phone: 914-883-6757

Category: Broker

Freight:  
Form:  
Quantity: Will pick up trailer load  
Assistance: REUSES waxed cardboard, box, baskets

Materials Accepted:

Pallets  
Waxed Cardboard  
Wirebound Boxes

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**Dontar Gypsum**

Contact: Jim Jenkins  
Address: 122 Old Dover Rd.  
Newington NH 03801  
Phone: 603-433-8000

Category: Processor, End user  
Freight: No transportation provided  
Form: CLEAN gypsum drywall only  
Quantity: No limits, fees by amount  
Assistance: Guidelines, fee schedule available

Materials Accepted:

Gypsum

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**Dontar Packaging, Recyc. Div.**

Contact: Norman Evanoff  
Address: 66 Shorncliffe Rd.  
Toronto ON M8Z 5K1 Canada  
Phone: 416-231-2525

Category: End-user, Processor  
Freight: FOB your dock. Can arrange trucking.  
Form: Baled  
Quantity: Trailer load  
Assistance:

Materials Accepted:

Boxboard  
Computer Print-out  
Corrugated Cardboard  
Mixed Paper  
White Ledger

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**Dumont Export Corporation**

Contact: Michael Aronson  
Address: PO Box 5549  
Philadelphia PA 19143  
Phone: 215-727-8000

Category: Processor  
Freight:  
Form: Clean and dry clothing  
Quantity:  
Assistance:

Materials Accepted:

Clean Clothes  
Shoes

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**E. Butterworth & Co., Inc.**

Contact: Robert Travis  
Address: 1951 Lakeview Ave.  
Dracut MA 01826  
Phone: 508-957-3500

Category: Processor  
Freight:  
Form:  
Quantity: Trailer loads  
Assistance:

Materials Accepted:

Clean Rags  
Textiles

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**Encore Paper**

Contact: Jeff Davis  
Address: 1 River St.  
S. Glens Falls NY 12803  
Phone: 518-793-5684

Category: Processor, End-user  
Freight: depends  
Form: baled/gaylords  
Quantity: truck load  
Assistance:

Materials Accepted:

Boxboard  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Magazines  
Mixed Paper  
Newspaper  
White Ledger

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**Enviro Tech**

Contact: Jon Maslowski  
Address: 670 Canton Street  
Norwood MA 02062  
Phone: 617-769-4260

Category: Processor, Broker, End-user

Freight: Can pick up  
Form: Loose or baled  
Quantity:  
Assistance:

Materials Accepted:

Plastic Bags  
Plastic Film

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**Environmental Resource Return**

Contact: Jonathan Nixon  
Address: 270 Exeter Rd, POB L  
- Epping NH 03042  
Phone: 603-679-2626

Category: Processor, End-user

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Asphalt  
Brick  
Clean Wood Waste  
Concrete  
Railroad Ties  
Stumps  
Telephone Poles

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**Fenwick Paper Brokerage**

Contact: Robert Perrault  
Address: PO Box 34, Route 105  
Newport Center VT 05857  
Phone: 802-334-2492

Category: Broker

Freight: FOB loading dock  
Form: baled/rolls/gaylords  
Quantity: 40,000 lbs for paper  
Assistance: baler and forklift leasing

Materials Accepted:

Glass  
Boxboard  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Magazines  
Mixed Paper  
Newspaper  
White Ledger  
Scrap Metal  
White Goods  
Steel Cans  
Textiles

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**Fiber Conversion, Inc.**

Contact: Nick Terlaak Poot  
Address: 15 E. Elm St.  
Broadalbin NY 12025  
Phone: 518-883-3431

Category: Processor

Freight: Pick up avail.  
Form: baled  
Quantity: unlimited  
Assistance:

Materials Accepted:

Urethane Foam  
Textiles

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**Fort Orange Paper Co.**

Contact: Dan Luizzi  
Address: 1900 River Rd.  
Castleton-on-Hud. NY 12033  
Phone: 518-732-7722

Category: End-user

Freight: FOB their dock.  
Form: loose or bales preferred  
Quantity: 1/2 ton  
Assistance:

Materials Accepted:

Newspaper

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**Foster-Forbes Glass Co.**

Contact: Rick Gallager  
Address: National Street  
Milford

MA 01757

Phone: 508-478-2500

Category: End-user

Freight: You arrange trucking. FOB their dock.  
Form: crushed or whole  
Quantity: truck load preferred  
Assistance:

Materials Accepted:

Glass

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**Free Flow Packaging Corp.**

Contact: Mary C. McLaughlin  
Address: 111 Allen Drive  
Newark

DE 19711

Phone: 800-888-7310

Category: End-user

Freight:  
Form: Baled, densified  
Quantity: Truckload quantities  
Assistance: Accept expanded polystyrene

Materials Accepted:

PS Plastic

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**Freedman & Son Inc.**

Contact: Richard Kent  
Address: Tibbetts Ave.  
Green Island

NY 12183

Phone: 518-273-1141

Category: Processor

Freight:  
Form:  
Quantity: No Minimum  
Assistance:

Materials Accepted:

Scrap Metal  
White Goods  
Steel Cans

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**Gianco Ltd.**

Contact: Jeff Berger  
Address: 20 Nancy Street  
West Babylon

NY 11704

Phone: 516-491-5800

Category: Broker, Processor

Freight:  
Form: Loose/baled/granulated  
Quantity: no minimum  
Assistance:

Materials Accepted:

HDPE Plastic Containers  
LDPE Plastic  
Other Plastic  
PETE Plastic Containers  
PP Plastic  
PS Plastic  
PVC Plastic  
Plastic Film

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**Goodman Recycling, Div. of WMI**

Contact: David Goodman  
Address: 203 Tremont St.  
Springfield

MA 01104

Phone: 413-785-5331

Category: Processor

Freight: FOB their dock.  
Form: baled  
Quantity:  
Assistance:

Materials Accepted:

Aluminum  
Cardboard  
Colored Ledger  
Computer Print-out  
Mixed Paper  
White Ledger

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**Hafner Industries, Inc.**

Contact: Edwin Hafner  
Address: Box 3925, Amity Stn.  
New Haven CT 06525  
Phone: 203-397-1562

Category: End-user/virgin quality reusable mater  
Freight: FOB their dock. You arrange trucking.  
Form: baled, loose or ground  
Quantity: open  
Assistance:

Materials Accepted:

HDPE Plastic Containers  
PETE Plastic Containers  
PVC Plastic  
Plastic Film  
Polyurethane

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**Hanna Paper Recycling Co.**

Contact: Joe Jelson  
Address: 1150 Rte. 1  
Sharon MA 02067  
Phone: 617-784-5155

Category:  
Freight: Individual basis  
Form: Loose or baled  
Quantity: varies  
Assistance: Transport and baling possible

Materials Accepted:

Colored Ledger  
Other Paper  
White Ledger

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**Hardwick Recycling and Salvage**

Contact: Serge Dupuis  
Address: Route 15  
Hardwick VT 05661  
Phone: 802-672-5949

Category: Broker, Processor  
Freight: Can pick-up or accept deliveries  
Form:  
Quantity:  
Assistance: Educ. training, roll-off leasing

Materials Accepted:

Aluminum  
Clean Wood Waste  
Glass  
Blueprints  
Boxboard  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Magazines  
Newspaper  
Telephone Books  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
PS Plastic  
Scrap Metal  
White Goods

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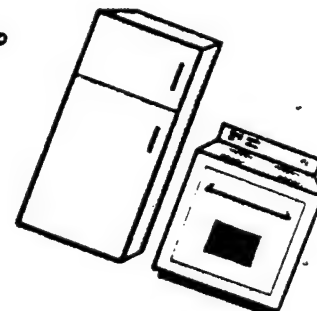
**Hodgdon Brothers**

Contact: Darcy Hodgdon  
Address: P.O. Box 136  
Ascutney VT 05030  
Phone: 802-674-6202

Category: Processor  
Freight:  
Form:  
Quantity:  
Assistance: landfill pick-ups/roll offs availab

Materials Accepted:

Aluminum  
Lead-acid Batteries  
Scrap Metal  
White Goods  
Tires



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**Hodgdon Brothers Recycling**

Contact: Porter Hodgdon  
Address: Ely St.  
St. Johnsbury VT 05819  
Phone: 802-748-5422

Category: Broker, Processor

Freight: free pick-up of autos and other scrap metal  
Form: as is  
Quantity: no min/max  
Assistance:

Materials Accepted:

Lead-acid Batteries  
Scrap Metal  
White Goods  
Steel Cans

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**Ingenuity Corporation**

Contact: T. J. Goetting  
Address: PO Box 203, North Rd  
Barnard VT 05031  
Phone: 802-234-5198

Category: Broker

Freight: FOB source site  
Form: Baled  
Quantity: Min. 20,000 pounds  
Assistance:

Materials Accepted:

Greenhouse Film  
Overwintering Film  
Plastic Film

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**Intervale Foundation**

Contact: Molly Farrell  
Address: 282 Intervale Road  
Burlington VT 05401  
Phone: 802-660-4949

Category: Processor, End User

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Food Waste  
Yard Waste

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**J. P. Routhier and Sons Inc.**

Contact:  
Address: 256 Ayer Road  
Littleton, MA 01460  
Phone: 508-772-4251

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Tires

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**J. Schwartz Motor Transport.**

Contact: Mr. Brewer  
Address: P.O. Box 4333  
Manchester NH 03108  
Phone: 603-627-4191

Category: Broker, Processor

Freight: You arrange trucking. FOB their plant.  
Form: Baled or loose  
Quantity: Unlimited  
Assistance: Trailer leasing

Materials Accepted:

Cardboard  
Colored Ledger  
Computer Print-out  
Newspaper  
White Ledger



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**Jalison Transplastek Inc.**

Contact: Kevin Greene  
Address: 1475 Marie Victorin  
St. Bruno

PQ J3V 687 Canada

Phone: 514-653-1535

Category: End-user

Freight: FOB your dock. Can arrange trucking.  
Form: POST-INDUSTRIAL regrind  
Quantity: 20 ton  
Assistance: NO POST-CONSUMER

Materials Accepted:

PP Plastic  
PS Plastic

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**Janci Metal Recycling**

Contact: Fred Janci Jr.  
Address: P.O. Box 5117  
West Lebanon

NH 03784

Phone: 603-298-5953

Category: Processor

Freight: Can be arranged  
Form: Prepared/unprepared  
Quantity: Any  
Assistance: Roll-off boxes; onsite baling

Materials Accepted:

Aluminum  
Batteries  
Scrap Metal  
White Goods  
Steel Cans  
Tires

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**Jewell Resources, Inc.**

Contact: Max Jewell  
Address: 2608 Meriden Rd.  
Lebanon

NH 03766

Phone: 800-458-4525

Category: Broker, Processor

Freight: Drop-off Ctrs in White River Jct & Lyndonville  
Form: any form  
Quantity:  
Assistance: baler/crusher/rolloff/hauling

Materials Accepted:

Aluminum  
Scrap Metal  
White Goods  
Steel Cans  
Tires

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**Josh Trading Co./Sara Glove Co**

Contact: William Pategas  
Address: 117 Benedict St.  
Waterbury

CT 06722

Phone: 203-574-3137

Category: Processor, Broker

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Textiles

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**KJ Plastics**

Contact: Jim King  
Address: 48 West Harvey St.  
Philadelphia

PA 19144

Phone: 215-699-2136

Category:

Freight: FOB their Dock  
Form: Baled, min. contamination  
Quantity: Truckload  
Assistance:

Materials Accepted:

Greenhouse Film  
HDPE Plastic Containers  
PETE Plastic Containers  
Plastic Film



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King Road Materials .

Contact: Jeff Frani  
Address: 145 Cordell Road  
Schenectady NY 12303  
Phone: 518-382-5353

Category: Processor, End-user

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Asphalt  
Concrete  
Glass

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M-R Land Excavation, Inc.

Contact: Dan Roy  
Address: 29 Scubie Pond Road  
Derry NH 03038  
Phone: 603-425-0300

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance: Will do on-site chipping

Materials Accepted:

Clean Wood Waste  
Stumps  
Pallets

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Manchester Recycling Corp.

Contact: Bob F./Karen Starr  
Address: P.O. Box 4387  
Manchester NH 03108  
Phone: 603-622-8422

Category: Processor

Freight: FOB their dock.  
Form: loose or baled  
Quantity:  
Assistance:

Materials Accepted:

Aluminum  
Lead-acid Batteries  
Boxboard  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Magazines  
Newspaper  
White Ledger  
Scrap Metal

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Marolf Enterprises Inc.

Contact: Alan Marolf  
Address: 139 Main Street, 606  
Brattleboro VT 05301  
Phone: 802-257-0151

Category: Broker

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Boxboard  
Computer Print-out  
Corrugated Cardboard  
Magazines  
Other Paper  
White Ledger

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McGoldrick Paper Company

Contact: Bob McGoldrick  
Address: 28 Canal St, POB 25  
Winsdale NH 03451  
Phone: 603-336-5079

Category: End-user

Freight:  
Form:  
Assistance: Pick-up large loads

Materials Accepted:

Colored Ledger  
Computer Print-out  
Magazines  
Mixed Paper  
Newspaper  
White Ledger

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**Nobil Chemical Company**

Contact: David Chapuis  
Address: 158 Capital Lane  
Winchester VA 22602  
Phone: 800-742-1035

Category: Processor, End-user

Freight: Variable  
Form: Baled  
Quantity: Truckload  
Assistance:

Materials Accepted:

Grocery Sacks  
Plastic Film  
Stretch Film

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**National Fiber Inc.**

Contact: Mr. Skee Fusco  
Address: 3 Depot St.  
Belchertown MA 01007  
Phone: 413-283-8747

Category: End-user

Freight:  
Form:  
Quantity:  
Assistance: Hauling services.

Materials Accepted:

Newspaper

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**Natl. Polystyrene Recycling Co**

Contact: Peter Riemschneider  
Address: P.O. Box 338  
Bridgeport NJ 08014  
Phone: 609-467-9377

Category: End-user

Freight:  
Form:  
Quantity:  
Assistance: call 609-467-9377 ext. 19

Materials Accepted:

PS Plastic

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**New England Processing**

Contact: Ed Betit  
Address: P.O. Box 495  
Hallowell ME 04359  
Phone: 207-582-6361

Category: Processor

Freight: FOB their dock  
Form: Gaylords/baled/bagged  
Quantity:  
Assistance:

Materials Accepted:

Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Hardcover Books  
Magazines  
Mixed Paper  
Newspaper  
White Ledger  
HDPE Plastic Containers  
Other Plastic  
PP Plastic  
PS Plastic  
PVC Plastic  
Plastic Film

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**Niagra Resin and Recycling**

Contact: Michael Hagan  
Address: 4870 Packard Rd  
Niagara Falls NY 14304  
Phone: 716-282-0235

Category: Processor, End-user

Freight: Variable  
Form: Baled, Gaylords  
Quantity: no minimum  
Assistance:

Materials Accepted:

LDPE Plastic  
PP Plastic

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**Nicon Plastics, Inc.**

Contact: Leslie Miller  
Address: 4-11 47th Ave.  
Long Island City NY 11101  
Phone: 718-392-1177

Category: Reprocessor

Freight: FOB their dock. Can arrange trucking.  
Form: baled  
Quantity: trailer load

Materials Accepted:

PETE Plastic Containers

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**North Shore Recycled Fiber**

Contact: Jonathan Gold  
Address: 53 Jefferson Ave.  
Salem MA 01970  
Phone: 508-744-4330

Category: Broker, End-user

Freight: FOB sellers dock.  
Form: Baled or loose  
Quantity:  
Assistance: Pick-up/trailers/forklift available  
Materials Accepted:

Boxboard  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Mixed Paper  
Newspaper  
Other Paper  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers

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**Northeast Kingdom SMD**

Contact: Irene Sawyer  
Address: O.O. Box 1075  
Lyndonville VT 05851  
Phone: 802-626-3532

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Aluminum  
Gable Top/Drink Boxes  
Glass  
Boxboard  
Brown Grocery Bags  
Corrugated Cardboard  
Magazines  
Mixed Paper  
Newspaper  
Telephone Books  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
Steel Cans  
Textiles

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**Northeast Waste Services, LTD**

Contact: Pat Stetson  
Address: P.O. Box 1045  
White River Jct. VT 05001  
Phone: 802-295-2660

Category: Processor

Freight: FOB depends on dealer  
Form: prefer bales/accept loose  
Quantity: no minimum  
Assistance: containers/hauling/planning/educate

Materials Accepted:

Aluminum  
Glass  
Boxboard  
Computer Print-out  
Corrugated Cardboard  
Magazines  
Mixed Paper  
Newspaper  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
PS Plastic  
Steel Cans

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Obex Inc.

Contact: Celeste Johnson  
Address: PO Box 1253  
Stamford  
Phone: 203-975-9094

CT 06904

Category: End-user  
Freight: FOB  
Form: flexible  
Quantity: flexible  
Assistance:

Materials Accepted:

Plastic Film  
Resins 1 - 7

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Orford Recycling, Inc.

Contact: Robert Parenteau  
Address: 1100 Talbot Street  
Sherbrooke

PQ J1G 2P2 Canada

Phone: 819-564-6004

Category: Broker, Processor, End-user  
Freight: Can arrange trucking  
Form: baled  
Quantity: 20 tons  
Assistance: plants: Montreal, Sherbrook

Materials Accepted:

Glass  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Newspaper  
White Ledger  
Plastic Containers  
Steel Cans

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Owens-Brockway Glass Inc.

Contact: Patti Hauser  
Address: 25 One Seagate  
Toledo

OH 43666

Phone: 419-247-1199

Category: End-user  
Freight: You arrange trucking.  
Form: whole or crushed  
Quantity: truck load  
Assistance:

Materials Accepted:

Glass

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Oxford Tire Supply, Inc.

Contact: Jim Madden  
Address: 1414 Norwich Rd.  
Plainfield

CT 06374

Phone: 800-873-8473

Category: End-user  
Freight: Included in price quote; provides shipping  
Form: whole, all sizes, rims ok  
Quantity: trailer load  
Assistance: trailer rentals

Materials Accepted:

Tires

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P. Allen and Son, Inc.

Contact: Edward Allen  
Address: P.O. Box 27  
Northampton

MA 01060

Phone: 413-584-3040

Category: Broker, Processor  
Freight: Can arrange for trucking.  
Form: loose or baled  
Quantity: truck load  
Assistance:

Materials Accepted:

Aluminum  
Cardboard  
Colored Ledger  
Computer Print-out  
Mixed Paper  
Newspaper  
White Ledger  
HDPE Plastic Containers  
Steel Cans



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Pallets Recycle of Vermont

Contact: Dave Blanchette  
Address: PO Box 119  
Williston VT 05495  
Phone: 802-878-8040

Category: End-user & selling  
Freight:  
Form:  
Quantity: delivered in truckloads  
Assistance:

Materials Accepted:

Pallets

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Palmer Shredding, Inc.

Contact: Nathan B. Palmer  
Address: PO Box 179  
North Ferrisburg VT 05473  
Phone: 802-425-4031

Category: Processor, End-user  
Freight: pick up available  
Form: car w/ rims; truck w/o  
Quantity: call for volume pricing  
Assistance: set up trailers for collection

Materials Accepted:

Tires

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Paper Services Ltd.

Contact: Gary O'Neal  
Address: P.O. Box 45  
Hinsdale NH 03451  
Phone: 603-239-6344

Category: Processor, End-user  
Freight: FOB their dock  
Form: Bales/carboys  
Quantity: No minimum  
Assistance:

Materials Accepted:

Colored Ledger  
Computer Print-out  
Magazines  
Mixed Paper  
Newspaper  
White Ledger

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Paperboard Industries Corp.

Contact: Fatima Camara  
Address: 495 Commissioners St  
Toronto ON M4M 1A5 Canada  
Phone: 416-461-8261

Category: End-user  
Freight: Can arrange trucking.  
Form: Baled  
Quantity: 20 tons  
Assistance:

Materials Accepted:

Boxboard  
Corrugated Cardboard  
Newspaper  
Other Paper

---

Papier Kinsey Fall/Cascade Div

Contact: Avery Perkins  
Address: 408 Rue Marie-Victir  
Kinsey Falls PQ J0A 1B4 Canada  
Phone: 819-363-5206

Category: End-user  
Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Boxboard  
Cores  
Corrugated Cardboard  
Mixed Paper  
Newspaper  
Telephone Books

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**Penacook Fiber Company**

Contact: Rick Allen  
Address: 12 N. Main St.  
Penacook NH 03303  
Phone: 603-753-6521

Category: End-user

Freight: You pay freight.  
Form: Baled only  
Quantity: 5 ton  
Assistance:

Materials Accepted:

Corrugated Cardboard

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**Pennsylvania Cullet**

Contact: Gerald Brocius  
Address: P.O. Box 247  
Corsica PA 15829  
Phone: 814-379-3271

Category: End-user

Freight: truck or rail delivery  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Glass

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**Pike Industries**

Contact: Ron Miller  
Address: Plainfield Rd Bx 365  
West Lebanon NH 03784  
Phone: 603-298-8773

Category: End-user

Freight:  
Form:

Materials Accepted:

Asphalt

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**Pinetree Waste Corp.**

Contact: Maurice Boutin  
Address: P.O. Box 402  
Keene NH 03431  
Phone: 603-357-4586

Category: Processor

Freight: Pick-up of materials available  
Form: loose or baled  
Quantity: no minimum  
Assistance: distribute baling mach/drum crusher

Materials Accepted:

Aluminum  
Lead-acid Batteries  
Boxboard  
Computer Print-out  
Corrugated Cardboard  
Newspaper  
White Ledger  
Scrap Metal  
Textiles

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**Polychem Products Ltd.**

Contact: Ron Paquette  
Address: 725 Gaudette Street  
St-Jean-Sur-Richel QC J3B 7S7 Canada  
Phone: 514-348-7392

Category: Processor

Freight: Variable  
Form: Baled (post-cons. bottles)  
Quantity: Truckload  
Assistance:

Materials Accepted:

HDPE Plastic Containers  
LDPE Plastic  
PETE Plastic Containers  
PP Plastic  
PS Plastic

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**Pure Tech International, Inc.**

Contact: Enrico Gallo  
Address: 91 E. Carmans Road  
E. Farmingdale NY 11735

Phone: 516-694-0142

Category: Processor  
Freight: contract carriers  
Form:  
Quantity: minimum 40,000lbs  
Assistance:

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**Materials Accepted:**

PETE Plastic Containers

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**Putney Paper Co., Inc.**

Contact: Buddy Edwards  
Address: P.O. Box 226  
Putney VT 05346

Phone: 802-387-5571

Category: End-user  
Freight: F.O.B. depends  
Form: baled  
Quantity: trailer load  
Assistance: Pick-up available

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**Materials Accepted:**

Computer Print-out  
Corrugated Cardboard  
Magazines  
Other Paper  
White Ledger

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**QUNO Corporation**

Contact: D. W. Schmaltz  
Address: Allenburg Road  
Thorold ON L2V 3Z5 Canada

Phone: 905-227-1121

Category: End-user  
Freight:  
Form:  
Quantity:  
Assistance:

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**Materials Accepted:**

Magazines  
Newspaper

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**R&R Industries, Inc.**

Contact: Hyman Robinovitz  
Address: 195 Rocus St.  
Springfield MA 01104

Phone: 413-733-2118

Category: Broker, Processor  
Freight: FOB their dock  
Form:  
Quantity:  
Assistance: Containers and bucket loaders avail

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**Materials Accepted:**

Scrap Metal  
White Goods  
Tires

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**Recoverable Resources/R2B2**

Contact: David Murd  
Address: 1809 Carter Ave.  
Bronx NY 10457

Phone: 718-731-3931

Category: Processor  
Freight: FOB their dock or pick-up  
Form: whole, baled or reground  
Quantity: no minimum  
Assistance:

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**Materials Accepted:**

HDPE Plastic Containers  
PETE Plastic Containers  
PVC Plastic

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**Recycle America/RRT**

Contact: Todd Petrocelli  
Address: 12 Elizabeth Drive  
Chelmsford MA 01824  
Phone: 508-250-4850

Category: Broker, Processor

Freight: Varies  
Form: Baled or loose  
Quantity: variable - no minimum  
Assistance: Pick-up and hauling, varies

Materials Accepted:

Aluminum  
Glass  
Boxboard  
Corrugated Cardboard  
Mixed Paper  
Newspaper  
HDPE Plastic Containers  
PETE Plastic Containers  
Steel Cans

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**Recycling Services**

Contact: Jim Silvers  
Address: Indstrial Blvd/POB305  
Claremont NH 03743  
Phone: 603-542-8755

Category: Broker, Processor

Freight: FOB delivered or point of pick-up  
Form: baled or loose  
Quantity: truck load  
Assistance: Scrap metal baling; rolloff lease

Materials Accepted:

Aluminum  
Lead-acid Batteries  
Glass  
Other  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Magazines  
Newspaper  
White Ledger  
HDPE Plastic Containers  
Overwintering Film  
PETE Plastic Containers  
PVC Plastic  
Shrink Wrap  
Stretch Film  
Scrap Metal  
Steel Cans

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**Reynolds Aluminum Recycling**

Contact: Stu Marvin  
Address: 110 Halycon Drive  
Bristol CT 06010  
Phone: 203-582-5179

Category: End-user

Freight: Can provide pick-up.  
Form: flattened/baled/biscuits  
Quantity: no minimum for delivered  
Assistance: Trailer & flattener/blower loaned

Materials Accepted:

Aluminum

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**Rock-Tenn. Company**

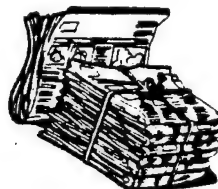
Contact: Thomas Pepple  
Address: PO Bx 465/21 Mill St  
Sheldon Springs VT 05485  
Phone: 802-933-5903

Category: End-user

Freight: arrange to have mtl. picked-up from broker  
Form: baled  
Quantity: truck load  
Assistance:

Materials Accepted:

Boxboard  
Colored Ledger  
Corrugated Cardboard  
Mixed Paper  
Newspaper  
White Ledger



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Rutland County MRF

Contact: Tim French  
Address: Green Hill Lane  
Rutland VT 05701  
Phone: 802-770-1330

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Aluminum  
Brick  
Clean Wood Waste  
Glass  
Pallets  
Boxboard  
Brown Grocery Bags  
Corrugated Cardboard  
Hardcover Books  
Magazines  
Mixed Paper  
Newspaper  
Telephone Books  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
PS Plastic  
Steel Cans  
Textiles

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Rutland Storage Trailers Inc.

Contact: Kevin & Jeff Elnicki  
Address: P.O. Box 609  
W. Rutland VT 05777  
Phone: 802-775-5568

Category: Processor

Freight: FOB your dock  
Form: loose or baled  
Quantity: 1,000 pounds  
Assistance: Provide roll-offs and toters

Materials Accepted:

Aluminum  
C&D  
Glass  
Boxboard  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Hardcover Books  
Magazines  
Mixed Paper  
Newspaper  
Other Paper  
Telephone Books  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
Scrap Metal  
White Goods  
Steel Cans

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Schiavone Brothers Inc.

Contact:  
Address: 16 Maquire Court  
Newton MA 02160  
Phone: 617-332-9074

Category:

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Scrap Metal

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**Shumen Plastics**

Contact: Ken Shumen  
Address: 35 Neoga St.  
Depeu

NY 14043

Phone: 716-685-2121

Category: End-user

Freight: They can arrange trucking. FOB depends.  
Form: clean, baled/ground/whole  
Quantity: 5 ton or more  
Assistance:

Materials Accepted:

HDPE Plastic Containers  
PETE Plastic Containers  
PP Plastic  
PS Plastic  
PVC Plastic

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**Sonoco Limited**

Contact: G.P. Poliquin  
Address: 25 Langlois St.  
Ternbonne

PQ J6W 4H4 Canada

Phone: 514-471-4153

Category: End-user

Freight: FOB their dock. Can arrange trucking.  
Form: baled  
Quantity: truckload  
Assistance:

Materials Accepted:

Corrugated Cardboard  
Newspaper

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**Sonoco Paper Recovery**

Contact:  
Address:

Phone:

Category:

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Corrugated Cardboard  
Mixed Paper  
Newspaper

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**Specialty Paperboard, Inc.**

Contact: John Caswell  
Address: P.O. Box 498  
Brattleboro

VT 05302

Phone: 802-257-0365

Category: End-user

Freight: All delivered prices  
Form: baled  
Quantity: 20 ton minimum  
Assistance:

Materials Accepted:

Computer Print-out  
White Ledger

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**St. Jude Polymers Corp.**

Contact: John Guers  
Address: 1 Industrial Park  
Frackville

PA 17931

Phone: 717-874-1220

Category: End-user

Freight: FOB your dock.  
Form: baled, ground or shredded  
Quantity: 25,000 lb.  
Assistance:

Materials Accepted:

HDPE Plastic Containers  
PETE Plastic Containers

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**St. Laurent Paperboard Inc.**

Contact: Michael Quinn  
Address: 1193 North Serv Rd W  
Oakville

ON L6M 2V8 Canada

Phone: 905-876-7402

Category: End-user

Freight:  
Form: Baled  
Quantity:  
Assistance: Will pick up

Materials Accepted:

Corrugated Cardboard

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**Strathcona Paper Co.**

Contact: Leo Giroux  
Address: Box 130  
Napawee

ON K7R 3L6 Canada

Phone: 613-378-6672

Category: End-user

Freight: You arrange trucking.  
Form: Baled only  
Quantity: 20 tons  
Assistance: (located near Kingston)

Materials Accepted:

Computer Print-out

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**Sunoco Products Co.**

Contact: Randy Michalak  
Address: 2 Sargeant Street  
Holyoke

MA 01040

Phone: 413-536-4546

Category: Broker, Processor

Freight: FOB their dock. You arrange trucking.  
Form: Bundled  
Quantity: truck load  
Assistance:

Materials Accepted:

Cardboard  
Magazines  
Newspaper

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**Sunrise Trading Corp.**

Contact: Jacob Yazejian  
Address: Hope & King Streets  
Jersey City

NJ 07307

Phone: 201-795-1747

Category: Broker, Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Textiles

---

**Superior Recycling**

Contact: Bill Gallagher  
Address: HCR Box 110A  
Cornish

NH 05745

Phone: 603-675-2112

Category: Processor

Freight:  
Form:  
Quantity:  
Assistance: containers and pick-up service

Materials Accepted:

Aluminum  
Boxboard  
Computer Print-out  
Corrugated Cardboard  
Newspaper  
White Ledger

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**Tenneco Packaging**

Contact: Larry Bettenhausen  
Address: 1159 Pittsford-Victor  
Pittsford

NY 14534

Phone: 716-248-1768

Category: Processor, End-user

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Grocery Sacks  
Plastic Film  
Stretch Film

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**Tenneco Packaging**

Address: 74 Weed Street  
Plattsburgh

NY 12901

Phone: 518-561-4880

Contact: Leon Aumell

Category: End-user

Freight: Can arrange delivery. FOB their dock.  
Form: baled preferred  
Quantity: no minimum  
Assistance: Uncoated paper

Materials Accepted:

Computer Print-out  
Newspaper

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Thermo-cell Insulation Ltd.

Contact: Bob Bossi  
Address: 2015 Lanthier Drive  
Orleans ON K4A 3V2 Canada  
Phone: 613-837-9797

Category: End-user

Freight: Will pay freight.  
Form: Baled preferred  
Quantity: Truck load  
Assistance: located in Ottawa

Materials Accepted:

Newspaper

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Trans-Americas Trading Co.

Contact: Edward Stubin  
Address: 116-122 West Street  
Brooklyn NY 11222  
Phone: 718-383-3445

Category: Broker, Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Textiles

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U.S. Polymers, Inc

Contact: Randolph Haight  
Address: 220 Broadway N303  
Lynnfield MA 01940  
Phone: 617-593-1414

Category: Broker

Freight: Pick up or FOB  
Form: Baled  
Quantity: Truckload or 20,000 lbs  
Assistance:

Materials Accepted:

Greenhouse Film  
HDPE Plastic Containers  
LDPE Plastic  
Molded Flower Pots  
Other Plastic  
Overwintering Film  
PETE Plastic Containers  
PP Plastic  
PS Plastic  
PVC Plastic  
Plastic Film  
Plastics

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United Resource Recvry-Hancor

Contact: Dave Markie  
Address: 30 Precision Drive  
N. Springfield VT 05150  
Phone: 802-886-8403

Category: End-user

Freight: They absorb freight; will arrange pick-up.  
Form: CLEAN HDPE FLAKE REGRIND  
Quantity: large loads preferred  
Assistance:

Materials Accepted:

HDPE Plastic Containers

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Vermont Republic Industries

Contact: Albin Voegelé  
Address: 3 Lemnah Dr. Box 628  
St. Albans VT 05478  
Phone: 802-524-6055

Category: Broker, Processor

Freight: Can arrange transport.  
Form: Loose & Industrial  
Quantity: No minimum  
Assistance: Commercial sources only.

Materials Accepted:

HDPE Plastic Containers  
PVC Plastic

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**WF Trading Company**

Contact: Wendell Farrell  
Address: PO Box 52  
Jerico VT 05465  
Phone: 802-899-2361

Category: Broker, Processor

Freight:  
Form:  
Quantity:  
Assistance:

Materials Accepted:

Textiles

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**WTE Recycling**

Contact: Paul Zordan  
Address: 136 C. Fuller Road  
Albany NY 12205  
Phone: 518-459-1080

Category: Processor

Freight: negotiated  
Form: Trailers/bulk  
Quantity: Full truckloads  
Assistance:

Materials Accepted:

PETE Plastic Containers

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**Waste Mgt. of Eastern New York**

Contact: Clayton Roaman  
Address: 12 Wing Street  
Fort Edward NY 12828  
Phone: 518-747-4688

Category: Processor, Broker

Freight: depends  
Form: baled & loose  
Quantity: no min  
Assistance: help w/ office recycling

Materials Accepted:

Aluminum  
Glass  
Boxboard  
Colored Ledger  
Computer Print-out  
Corrugated Cardboard  
Mixed Paper  
Newspaper  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers  
Steel Cans

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**Wellington Hill Recycling Co.**

Contact: George James  
Address: Box 424 RFD#3  
Putney VT 05346  
Phone: 802-463-1417

Category: Broker, Processor

Freight:  
Form: loose OK  
Quantity:  
Assistance: Will pick-up and bale.

Materials Accepted:

Computer Print-out  
Mixed Paper  
White Ledger  
HDPE Plastic Containers  
PETE Plastic Containers

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**Wellman, Inc.**

Contact: Harry Benson  
Address: 1040 Broad St/Ste302  
Shrewsbury NJ 07702  
Phone: 908-935-7308

Category: End-user

Freight: FOB at shipping point.  
Form: baled (app. 700 lbs.)  
Quantity: minimum 30,000 lbs  
Assistance: Trucks available for pick-ups.

Materials Accepted:

PETE Plastic Containers

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**Wellman, Inc.**

Contact: Sue Hunter  
Address: PO Box 313  
Bridgeport  
Phone: 609-241-8009

NJ 08014

Category: End-user

Freight: FOB at shipping point.  
Form: Baled only  
Quantity: minimum 30,000 lbs  
Assistance:

Materials Accepted:

PETE Plastic Containers

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**William Goodman and Sons**

Contact:  
Address: 2431 Boston Road  
Willbraham  
Phone: 413-568-4500

MA 01095

Category: Broker, Processor

Freight: Can arrange trucking.  
Form: Baled preferred  
Quantity: 15-20/ton  
Assistance: Lease and sell balers/compactors

Materials Accepted:

Cardboard  
Computer Print-out  
Mixed Paper  
Newspaper  
Other Paper  
White Ledger

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**Windham S&M**

Contact: Jane Southworth  
Address: 327 Old Ferry Road  
Brattleboro

VT 05301

Phone: 802-258-2645

Category: Processor

Freight:  
Form:  
Quantity: No minimum quantity  
Assistance: Drop-offs avail. throughout district

Materials Accepted:

Aluminum  
Glass  
Boxboard  
Corrugated Cardboard  
Magazines  
Mixed Paper  
Newspaper  
HDPE Plastic Containers  
PETE Plastic Containers  
Steel Cans

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**Wood Recycling Inc.**

Contact: James McElvenney  
Address: 3 Wheeling Avenue  
Woburn

MA 01801

Phone: 800-982-8732

Category: Processor, End-user

Freight:  
Form:  
Quantity: any amount  
Assistance: will haul in 100cy trailers

Materials Accepted:

Clean Wood Waste  
Newspaper  
Telephone Books



## G: REUSE OPPORTUNITIES

### 1. Vermont Business Materials Exchange:

Don't pay to throw it away!

Material exchanges provide businesses with an opportunity to reuse waste materials. Vermont companies are saving on disposal fees by listing their wastes with the *Vermont Business Materials Exchange* rather than sending them to the landfill. You too, can save money through this state-funded program. There is no charge to use this service. Here are some of the materials that have been listed on the exchange. To list your own wastes, or if you would like a full list of currently available or wanted materials, call the VBMeX at 1-800-895-1930.

#### *Available Materials:*

Polystyrene plastic spools  
Textiles of all kinds  
Crushed concrete  
Metal boxes  
Scrap wood  
Orange rinds  
Virgin freon  
Wooden dowels

Plastic buckets  
Nylon fabric scrap  
Wooden pallets  
Corrugated cartons  
Disposable gloves  
Film containers  
HDPE pails  
Steel drums  
Shredded paper  
Bubble packaging bags

Wood chips  
9 volt batteries  
Fiberglass matt  
Burlap bags  
Gift boxes

#### *Wanted Materials:*

Packaging peanuts  
Boxes  
Printer ribbons/cartridges  
Used clothing

*To request a full listing of reusable commercial and industrial wastes, or to list one of your company's wastes, call 1-800-895-1930.*



*Finding New Uses for Vermont's  
Commercial and Industrial Wastes*

### 2. National Waste Exchange:

National Materials Exchange Network  
522 North Washington Street, Suite 202  
Spokane, WA 99201  
(509) 325-0507



### 3. Salvage Yards and Reuse Centers: (starting with Vermont listings)

Organization: Architechural Salvage Warehouse  
Contact Person: David Ackerman  
Address: 212 Battery Street  
Town: Burlington VT 05401  
Phone Number: 802-658-5011

Organization: Mason Brothers Salvage  
Contact Person: David Mason  
Address: 11 Maple Street  
Town: Essex Junction VT 05452  
Phone Number: 802-879-4221

Organization: Second Harvest - Salvage & Demolition  
Contact Person: John Wilson  
Address: RR #1, Box 194 E  
Town: Jeffersonville VT 05464  
Phone Number: 802-644-8169

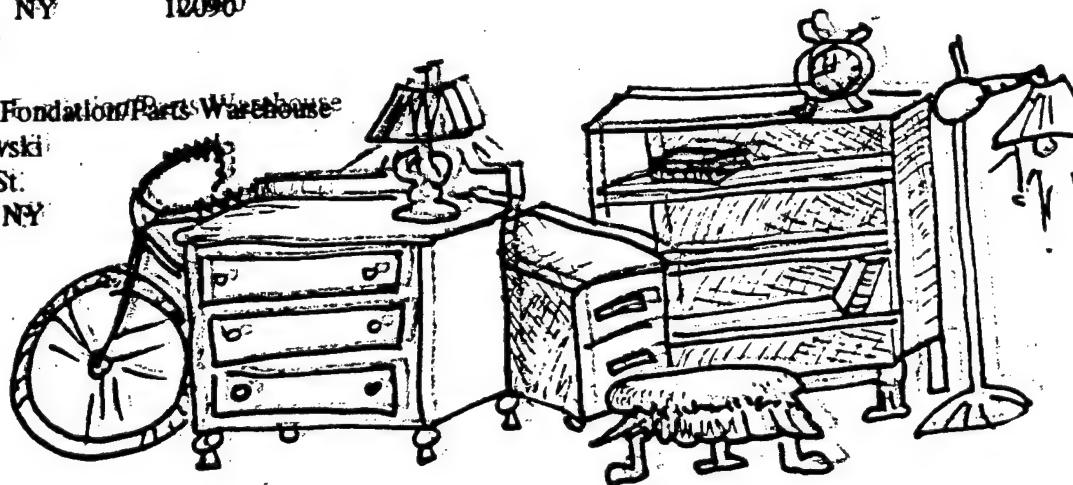
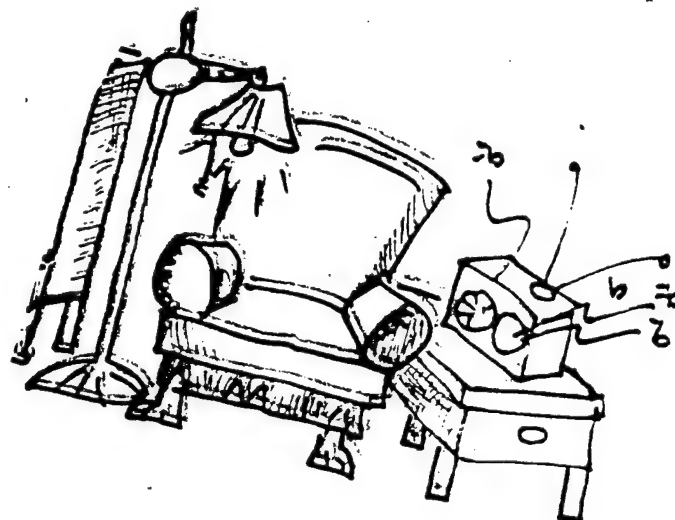
Organization: Vermont Goods Exchange  
Contact Person: Nate Williams  
Address: P.O. Box 601  
Town: Arlington VT 05250  
Phone Number: 802-375-9383

Organization: Vermont Salvage Exchange  
Contact Person:  
Address: Box 453  
Town: White River Jct. VT 05001  
Phone Number: 802-295-7616

Organization: DORP Salvage Co. Inc.  
Contact Person:  
Address: 566 Broadway  
Town: Schenectady NY 12305  
Phone Number: 518-393-1744

Organization: East Rensselaer County's Community Warehouse  
Contact Person: Audrey Harriott  
Address: 21428 NY 22  
Town: Hoosick Falls NY 12090  
Phone Number: 518-686-7540

Organization: Historic Albany Foundation Parts Warehouse  
Contact Person: Jeffrey Dembowski  
Address: 399 South Pearl St.  
Town: Albany NY  
Phone Number: 518-465-2987



4. Computer Reuse: (New England companies are listed first)

Boston Computer Society 101 First Ave, Suite 2 Waltham MA 02154; 617-290-5700 (PC's/IBM 286+, Apple, Macs)

Computer Exchange Taft Corner Shopping Center Williston VT 05495; 802-879-3433

East West Foundation 23 Drydock Avenue, 3rd Floor Boston MA 02210; 617-261-6699 (non-profit computer exchange)

Gifts In Kind 700 N. Fairfax St., Suite 300 Alexandria VA 22314; 703-836-2121 (non-profit/distribute to schools)

Micro Mechanics 4175 Sodom Road Milton VT 05468; 800-639-8126 (monitors only, no monochrome)

Natl. Cristina Foundation 591 W. Putnam Rd. Greenwich CT 06830; 800-274-7846 (< 10 years old, no dumb terminals)

Tecnotes PO Box 1589 Sag Harbor NY 11963; 516-725-2006 (circuit boards only)

VT Assistive Tech. Recyc. Proj 23 Pleasant Street Springfield VT 05156; 800-491-6840 (publish catalogue)

5. Computer Reuse and Recycling: (New England companies are listed first)

C.E.C. Enterprises 110 Middlesex St. North Chelmsford MA 01863; 508-251-0373

Computers Plus 338 Dorset Street S. Burlington VT 05403; 802-863-5633

Digital Equipment Co. 932 Maple Street Contoocook NH 03229; 603-746-8227 (computer and kindred electronics)

EPAinc: Electronics Processing Assoc Inc 1A Foundry Street Lowell MA 01852; 508-970-2700

GeoSoft: The Company PO Box 643 Bellows Falls VT 05101; 603-756-4245

MKR Data Resources 186 Harris Road Nashua NH 03062; 603-888-8015

RST Computer Services 66B River Road Hudson NH 03051; 603-595-8708

Ribbon Recyclers 28 Commerce Street, Unit 3, PO Box 878 Williston VT 05495; 802-660-8960

WA Technology 15 Keewaydin Drive Salem NH 03079; 603-890-4040

Advanced Recovery Inc. 3 Montgomery Street Bellville NJ 07109; 201-450-9797

Envirocycle, Inc. PO Box 899 Hallstead PA 18822; 717-879-2862

Equipment Recycling Services 4641 Pell Drive, Unit #9 Sacramento CA 95838; 800-258-0070

Texas Recycling & Refining, Inc. 1920 Rankin Road Houston TX 77073; 713-443-3973 (electronics)

Tryonics 8 Merrill Industrial Drive Hampton NH 03842; 603-926-1122

**6. Laser Toner Printer Cartridges:**

Black Lightning Riddle Pond Road, W. Topsham VT 05086; 800-252-2599

Cartridge Care of Vermont 200 Main Street Winooski VT 05404; 802-655-9774

Ideal Computer Supplies PO Box 5748 Endicott NY 13760; 607-757-0025

Lasertech RR 2 Box 41 West Burke VT 05871; 802-626-9947

McAuliffe Inc. PO Box 848 Burlington VT 05402; 800-642-5131

Ribbon Recyclers PO Box 472 Bethel VT 05032; 800-584-7244

Ribbon Recyclers 28 Commerce Street, Unit 3, PO Box 878 Williston VT 05495; 802-660-8960

Vermont Toner Recharge 266 Pine Street Burlington VT 05401; 802-864-7637

**7. Packaging Peanuts:**

Packaging peanuts can be reused by many businesses in Vermont. Contact your Solid Waste Management District for local packaging peanuts reuse opportunities, or call the Plastic Loose Fill Council at 1-800-828-2214.

**8. Printer Ribbon Recycling:**

Gerald Hall Sales & Service PO Box 404 Hardwick VT 05843; 802-472-3361

Ideal Computer Supplies 3120 E. Main Street Endwell NY 13760; 607-757-0025

Ribbon Recyclers PO Box 12 Essex Jct VT 05453; 802-879-3027

## **H: OTHER RECYCLING OPPORTUNITIES**

### **1. Antifreeze Recycling Services:**

Ecoserve Inc. PO Box 190 Randolph VT 05060; 802-728-3435

JTL Ecosystems RR1 Rt. 30, Box 816B Dorset VT 05351; 802-362-2144

### **2. Dry Cell Batteries: (non alkaline)**

Int. Metal Reclamation Co. Inc. PO Box 720 Ellwood City PA ; 412-758-5515

Mercury Refining Co., Inc. 790 Watervliet-Shaker Rd Latham NY 12110; 800-833-2505

Rechargeable Battery Recycling Corp.; 800-8-BATTERY

### **3. Freon Recovery - Certified Operators:**

Call the Ozone Protection Hotline 800-296-1996. The hotline can supply a list of technician certification programs that are approved by EPA. Operators must have been trained through an approved program before they can remove freon from waste appliances.

#### 4. Scrap Metal Dealers:

ABC Appliance & Metals Recycling/Rhodes 15 Shirely Avenue Milton VT 05468; 800-499-7089

All Metal Recycling, PO Box 1028, Morrisville, VT 05661; 1-800-416-8054

Bolduc Auto Salvage RFD 3, Box 2460 Montpelier VT 05602; 802-223-7917

Brandon Scrap Metal RD 2, Route 7 Leicester VT 05733; 802-247-8800

Brattleboro Salvage 160 Vernon Road Brattleboro VT 05301; 802-254-5388

Brown Auto Salvage Box 275 Bomoseen VT 05732; 802-468-5757

Capitol Bag & Waste Port of Albany Albany NY 12202; 518-465-4914

Clarence Brown Inc Federal Street St. Albans VT 05478; 802-524-2400

Flynn Avenue Scrap Metal Recycling Milton VT 05468; 802-893-1549

Gates Salvage Craftsbury Road Hardwick VT 05843; 802-472-5794

George Apkin & Sons, Inc 80 State Street North Adams MA 01247; 413-664-4936

Hardwick Recycling P.O. Box 138 Morrisville VT 05661; 800-639-3083

Hodgdon Brothers White River Jct. 05001; 802-295-5740

Hodgdon Brothers P.O. Box 136 Ascutney VT 05030; 802-674-6202

Hodgdon Brothers Ely Street St. Johnsbury VT 05819; 802-748-5422

Hodgdon Salvage PO Box 19 Swanton VT 05488; 802-868-7280

Janci Metal Recycling PO Box 117 West Lebanon NH 03784; 603-298-5953

Jewell Resources, Inc 260 B. Meriden Rd. Lebanon NH 03766; 800-458-4525

La Roche Inc. Route 14 South Barre VT 05670; 802-479-0269

MAC Equipment & Steel Co 286 North Main Street Rutland VT 05701; 802-773-2911

Madbury Metals Co PO Box 40 Dover NH 03820; 603-749-3314

Pickett's Metal Recycling Center Ferrisburgh VT 05456; 802-425-2369

Queen City Iron & Metal Intervale Road Burlington VT 05402; 802-864-0326

R. Brown & Sons 31 Pointers Point Rd Colchester VT 05446; 802-658-1378

Rathe Brothers Rathe Road Colchester VT 05446; 802-655-0651

Recycled Auto Parts of Brattleboro RR 6, Box 32 Brattleboro VT 05301; 800-654-9034

Rutland Waste & Metals 246 West Street Rutland VT 05701; 802-773-2877

Vermont Metal Exchange Route 2A Colchester VT 05446; 800-479-1813

WTE Recycling Inc. 75 Southern Ave. Greenfield MA ; 413-772-2200

**I: DIRECTORIES** (comprehensive material-specific recycling market directories)

1. All Recyclable Materials:

*American Recycling Market Directory/Reference Manual*

American Recycling Market Inc.  
PO Box 577, Ogdensburg NY 13669  
1-800-267-0707

2. Plastics:

*1995 Post-consumer Plastics Handlers and Reclaimers*

American Plastics Council  
1275 K Street NW, Suite 400  
Washington DC 20005; 1-800-2HELP-90

*Post-Consumer PET Plastic Market List*

NAPCOR  
3770 Nations Bank Corporate Center  
100 North Tryon Street, Charlotte NC 82802  
704-358-8882

*A Guide to Vinyl Recycling in the U.S. and Canada*

The Vinyl Institute  
One Cascade Plaza, 19th Floor, Akron OH 44308  
1-800-969-8469

3. Paper:

*PaperMatcher*

American Paper Institute, Inc  
1250 Connecticut Ave, NW, Suite 360  
Washington DC 20036  
1-800-878-8878

**J: CLOSING THE LOOP - BUYING RECYCLED PRODUCTS**

1. Vermont-specific:

*Closing the Loop: A Guide to Recycled Products and Services.*

Cost: \$5.00  
Association of Vermont Recyclers  
P.O. Box 1244, Montpelier, VT 05601  
(802) 229-1833

2. Office Supplies:

*Buy Recycled - The Business and Govt. Buyers Guide to Recycled Products*

Cost: \$24.95  
Californians Against Waste Foundation  
926 J St, Suite 606, Sacramento CA 95814  
(916) 443-8317

*Guide to Recycled Printing & Office Paper with Post-consumer Content*

Cost: \$2.00  
Californians Against Waste Foundation  
926 J St, Suite 606, Sacramento CA 95814  
(916) 443-8317

*BUY RECYCLED - Your practical Guide to the Environmentally Responsible Office*

Cost: \$7.95  
Services Marketing Group  
8 South Michigan Ave., Suite 2500  
Chicago IL 60603  
(312) 332-0688

*Recycled Products Guide*

Cost: \$195  
American Recycling Market, Inc.  
P.O. Box 577, Ogdensburg, NY 13669  
1-800-267-0707

3. Consumer Directories:

*Shopper's Guide to Recycled Products*

Cost: \$2.00  
Californians Against Waste Foundation  
926 J St, Suite 606, Sacramento CA 95814  
1-800-2HELP-90

## **K: INFORMATION ON RECYCLING AND REUSE: State and National Organizations**

### **ALUMINUM**

**Aluminum Recycling Association**  
1000 16th Street, NW, Suite 603  
Washington, DC 20036  
202-785-0951  
Fax: 202-785-0210

### **GLASS**

**Glass Packaging Institute**  
1627 K Street, NW, Suite 800  
Washington, DC 20006  
202-887-4850

### **METALS**

**Institute of Scrap Recycling Industries**  
1627 K Street, NW, Suite 700  
Washington, DC 20006  
202-466-4050

**Steel Recycling Institute**  
680 Andersen Drive  
Pittsburgh, PA 15220  
1-800-876-SCRI

### **PAPER/PAPER PACKAGING**

**American Forest & Paper Association**  
1250 Connecticut Ave, NW, Suite 201  
Washington, DC 20036  
800-878-8878  
Fax: 202-463-2785

**Corrugated Packaging Council**  
Rolling Meadows, IL  
1-800-879-9777

**Paperboard Packaging Council**  
1101 Vermont Ave, NW, Suite 411  
Washington, DC 20005  
202-289-4100  
Fax: 202-289-4243

### **PLASTICS**

**American Plastics Council**  
1275 K Street, NW, Suite 400  
Washington, DC 20005  
1-800-2-HELP-90

**Plastic Loose Fill Council**  
1-800-828-2214 (hotline lists local locations for  
where to bring used polystyrene packaging  
peanuts)

**National Association for Plastic Container  
Recovery (PETE Plastic)**  
100 N. Tryon Street, Suite 3770  
Charlotte, NC 28202  
704-358-8882  
Fax: 704-358-8769

**Polystyrene Packaging Council**  
1025 Connecticut Avenue, NW  
Washington, DC 20036  
202-822-6424  
Fax: 202-331-0538

**Plastic Bag Association**  
335 Lexington Ave.  
New York, NY 10017-6603  
(212) 661-4261

**Plastic Bag Information Clearinghouse** (provides  
listings for plastic bag collection sites)  
1-800-438-5856

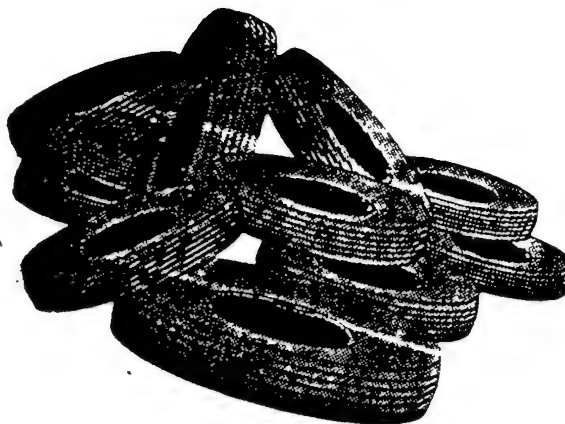


## **TIRES**

**National Tire Dealers & Retreaders Association**  
12501 Street, NW, Suite 400  
Washington, DC 20005  
202-789-2300  
Fax: 202-682-3999

**Tire Retread Information Bureau**  
900 Weldon Grove  
Pacific Grove, CA 93950  
408-372-1917  
Fax: 408-372-9210

**Scrap Tire Management Council**  
1400 K Street, NW, Suite 900  
Washington, DC 20005  
202-408-7781



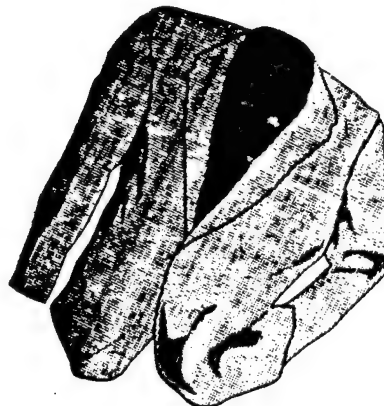
## **TEXTILES**

**Council for Textile Recycling**  
7910 Woodmont Ave., Suite 1212  
Bethesda, MD 20814  
301-718-0671

**Textile Fibers & By-Products Assoc.**  
PO Box 553026  
Atlanta, GA 30355  
404-262-2477

## **OTHER**

**Filter Manufacturer's Council**  
Hotline has a list of companies that provide filter  
management services  
1-800-99-FILTER





## **L: ORGANIZATIONS FOCUSING ON RECYCLING AND RELATED AREAS**

### **1. Vermont and New England Organizations:**

#### **Association of Vermont Recyclers**

Barry Lampke  
PO Box 1244  
Montpelier, VT 05601  
802-229-1833

AVR provides information and assistance to individuals, businesses, and institutions to help vermonters develop recycling, reduction and reuse programs. AVR publishes curriculum guides and performs interactive assembly programs on pollution prevention, recycling and composting.

#### **Northeast Resource Recovery Assoc., (NRRA)**

E. Dana Draper  
Box 721  
Concord, NH 03302-0721  
(603) 224-6996

NRRA is a non-profit membership organization offering member municipalities access to cooperative marketing programs covering the full range of municipal recyclables; also offers cooperative purchasing programs and provides technical support for all cooperative activities.

#### **Business Recycling Corporation**

E. Dana Draper  
Box 721  
Concord, NH 03302-0721  
(603) 224-6996

The Business Recycling Corporation offers recyclable materials marketing, transportation and consulting services to businesses, business cooperatives and institutions.

#### **National Recycling Coalition**

1101 30th Street, N.W. Suite 305  
Washington, DC 20036  
202-659-4613  
Fax: 202-775-5917

#### **National Solid Waste Management Association**

1730 Rhode Island Drive, N.W.,  
Suite 1000  
Washington, DC 20036  
202-659-4613  
Fax: 202-775-5917

#### **Institute for Local Self Reliance**

Conducts research and provides technical assistance to communities on recycling economic development  
Publications available on economic benefits of recycling  
2425 18th Street NW  
Washington D.C. 20009  
202-232-4108

#### **US Environmental Protection Agency**

Office of Solid Waste  
401 M St. SW  
Washington DC 20460  
1- 800-424-9346

### **2. National Organizations:**

#### **Environmental Action Foundation**

6930 Carroll Ave. Suite 600  
Takoma Park, MD 20912  
301-891-1109

#### **Environmental Defense Fund**

257 Park Avenue South  
New York NY 10010  
212-505-2100

**M: VERMONT RECYCLING COORDINATORS LIST: (area code 802)**  
(Contact recycling coordinators for the most local recycling options in your area.)

Porter Knight, Recycling Coordinator  
Addison County Solid Waste District  
PO Box 573, RT 7 South  
Middlebury VT 05753-9707  
388-2333, FAX 388-0037 1-800-315-2333

Nate Williams  
Bennington Regional Planning Commission  
Box 342  
Arlington VT 05250-0342  
375-9964, FAX 375-9964

Cindy Burton, Recycling Operations Coord.  
Burlington Public Works  
33 Kilburne Street  
Burlington VT 05401-5264  
865-7262 864-7653 (fax)

Deb Fyffe, Recycling Coordinator  
Central Vermont Solid Waste District  
260 North Main Street  
Barre VT 05641  
479-4363, FAX 479-4339  
1-800-730-9475

Nancy Plunkett & Wendy McArdle  
Chittenden Solid Waste District  
209 Redmond Road  
Williston VT 05495-9133  
872-8100/8111, FAX 878-5787

Sami Izzo, Recycling Ed. Coordinator  
Greater Upper Valley Solid Waste District  
Colton Center Office Park  
221 South US RT 5, #2  
Norwich VT 05055-9432  
649-2610, FAX 649-2913

Teri White, Manager  
Lamoille Regional Solid Waste District  
RR #1, Box 2264  
Morrisville VT 05661-9788  
888-7317, FAX 888-650

NH/VT Solid Waste Program  
Room 218 Moody Building  
Claremont NH 03743  
(603) 543-1201

Irene Sawyer, Recycling Coordinator  
Northeast Kingdom Waste Mgmt District  
RR #1, Box 376  
Lyndonville VT 05851-9749  
626-3532/3563 or 800-734-4602

Kathryn Duffy, Recycling Coordinator  
Northwest VT Solid Waste District  
PO Box 1547  
St Albans VT 05819-1006  
524-5986 1-800-639-7053

Rutland Non-district Towns  
Pam Clapp  
J.M.S.C.\S.W.A.C.  
376 Daisy Hollow Road  
Middleton Springs, VT 05757-4134  
235-2710

Deane Wilson, Recycling Coordinator  
Rutland County Solid Waste District  
2 Green Hill Lane  
Rutland VT 05701-3804  
775-7208/7209 or 773-4083, FAX 773-5796

Hallie Whitcomb, Recycling Coord.  
607 Highland Rd.  
Springfield VT 05156-8844  
home: 885-3376 FAX 886-2200

Jane Southworth  
Windham Solid Waste District  
327 Old Ferry Road  
Brattleboro VT 05301-9175  
257-0272



## **APPENDIX F**

### **MANAGEMENT OF OZONE-DEPLETING SUBSTANCES**



22 MAY 1993

REPLY TO  
ATTENTION OF:

CECW-OA

MEMORANDUM FOR COMMANDERS, MAJOR SUBORDINATE COMMANDS

SUBJECT: U.S. Army Corps of Engineers (USACE) Operated Facilities Environmental Compliance Guidance Letter No. 6, Managing Ozone-Depleting Substances (ODSs) at USACE Projects and Facilities

1. Purpose. This guidance letter provides interim guidance for managing ODSs at USACE projects and facilities until ER 200-2-3 Environmental Compliance and EP 200-2-3 Environmental Compliance are published.
2. Applicability. This guidance applies to all Headquarters, USACE elements, major subordinate commands (MSCs), district commands, engineering laboratories and field operating activities (FOA) having responsibilities for Civil Works funded activities, including floating plant. USACE research and development laboratories and other facilities that are wholly or substantially military funded but not located on military installations shall adapt the ozone-depleting substance guidance in "Strategic Guidance and Planning for Eliminating Ozone-Depleting Chemicals from U.S. Army Applications" [reference (b)], in coordination with CECW-OA. USACE facilities located on Army installations will comply with the installation commanders' ozone-depleting substance elimination program requirements.
3. References.
  - (a) Executive Order 12843, 21 April, 1993
  - (b) Strategic Guidance and Planning for Eliminating Ozone-Depleting Chemicals from U.S. Army Applications, U.S. Army Acquisition Pollution Prevention Support Office (AAPPSO), Verdonic, Daniel P. and Thomas A. Bush, October, 1995
  - (c) Clean Air Act Amendments, 42 U.S.C. § 7671 et seq.
  - (d) 40 C.F.R. Part 82 (Protection of Stratospheric Ozone)
4. Policy.
  - (a) It is the policy of USACE, in conformance with Executive Order (EO) 12843, to:
    - (i) implement cost-effective programs to minimize the

CECW-OA  
SUBJECT: USACE Operated Facilities Environmental Compliance  
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Facilities

procurement of materials and substances that contribute to the  
depletion of stratospheric ozone; and

(ii) give preference to the procurement of alternative  
chemicals, products, and manufacturing processes that reduce  
overall risks to human health and the environment by lessening  
depletion of ozone in the upper atmosphere.

(b) In implementing this policy, procurement practices shall  
conform to the general requirements of Title VI of the Clean Air  
Act Amendments by:

(i) minimizing, where economically feasible, the pro-  
curement of products containing, or manufactured with, Class I  
substances in accordance with EPAs phaseout schedule and  
maximizing the use of safe alternatives;

(ii) amending existing contracts to the extent permitted by  
law and, where practical, to be consistent with the  
phaseout schedules for Class I substances;

(iii) being aware of the phaseout schedule for Class II  
substances (Clean Air Act Amendments, Section 605) in developing  
procurement policies and in awarding contracts; and

(iv) implementing policies and practices that recognize the  
increasingly limited availability of Class I substances as  
production levels capped by the Montreal Protocol decline until  
final phaseout. Such practices shall include, but not be limited  
to:

- o reducing emissions and recycling ozone-reducing  
substances;

- o ceasing the purchase of non-essential products  
containing or manufactured with ozone-depleting substances; and

- o requiring that new contracts provide that any  
acquired products containing, or manufactured with, Class I or  
Class II substances be labeled in accordance with section 611 of  
the Clean Air Act Amendments.

(c) USACE projects and facilities shall establish, fund and  
implement management programs to support this policy. MSC  
commanders, district commanders and commanders/directors of  
facilities outside the district structure shall develop internal  
procedures to assure compliance with all aspects of this policy.

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Facilities

ODS Elimination Plans shall be prepared for all projects and facilities where USACE has operations and maintenance responsibility for facility needs, including government-owned, contractor-operated facilities. Production phase-out milestones are contained in the Clean Air Act Amendments and are listed in the Army Acquisition Pollution Prevention Support Office publication "Strategic Plan for Eliminating Ozone-Depleting Chemicals from U.S. Army Applications." See reference 3.(b).

#### 5. Definitions.

(a) Ozone-Depleting Substances means the substances controlled internationally under the Montreal Protocol and nationally under Title VI of the Clean Air Act Amendments. This includes both Class I and Class II substances.

(b) Class I substance means any substance designated as Class I in the Federal Register notice of 30 July 1992 (see Appendix B), including chlorofluorocarbons, halons, carbon tetrachloride, and methyl chloroform and any other substance so designated by the Environmental Protection Agency (EPA) by regulation.

(c) Class II substance means any substance designated as Class II in the Federal Register notice of 30 July 1992 (see Appendix B), including hydrochlorofluorocarbons and any other substances so designated by EPA by regulation.

#### 6. Program Requirements.

(a) Identify sources of ODSs and determine type and amount.

(b) Monitor regulated ODSs to comply with standards.

(c) Procure equipment that meets applicable standards.

(d) Cooperate with Federal, state, and local authorities in achieving ODS plan goals.

(e) Assure that all technicians who service appliances and industrial process refrigeration units containing ODSs are certified by an EPA approved program in accordance with 1990 Clean Air Act Amendments, Title VI, Section 602(a). See reference 3.(c).

(f) USACE organizations in GSA leased facilities and USACE users of GSA leased vehicles will support applicable GSA programs to eliminate ODS use in accordance with lease agreements.

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Facilities

(g) Annually, commanders/directors must document their ODS elimination requirements. Documentation must reflect total or "real" cost to the facility plus justification for continuing resources to accomplish projects aimed specifically at eliminating ODS applications.

#### 7. Guidance.

(a) Executive Order 12843 established a policy of the Federal government to implement cost-effective programs to minimize procurement of materials and substances that contribute to depletion of stratospheric ozone and give preference to procurement of alternative chemicals, products and manufacturing processes that reduce overall risks to human health and the environment by lessening depletion of ozone in the upper atmosphere.

(b) The Army's objective is to end dependence on ODS use in equipment and processes so that the pending phaseout of Class I ODSS causes minimal impact on Army missions. Although the Class I phaseout applies to chemical production and import only, and does not apply to their use, EO 12843 and Army policy do. Class I Substances list can be found in 40 C.F.R. Part 82, Appendix A.

(c) The key to efficiently eliminating ODSS from USACE projects and facilities is developing and implementing comprehensive ODS elimination plans. Operational project managers or facility managers should develop and execute ODS elimination plans addressing applicable facilities and equipment. Advance planning for phaseout of ODSS will minimize impact on individual projects and facilities. The Appendix describes steps involved in ODS elimination planning.

8. Yearly Updates. Operational project managers and facility managers should update their ODS elimination plans in advance of each annual budget cycle to reflect projected costs, plus justification for necessary resources, and provide input to the budget process. ODS coordinators should prepare updated versions of the ODS elimination plan when yearly updates are made. The updated yearly plan should reflect both accomplishments made against planned goals and unfinished requirements for eliminating ODSS.

#### 9. Resourcing ODS Elimination.

(a) There is no special funding for ODS elimination. ODS elimination requirements shall be included in the applicable

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Facilities

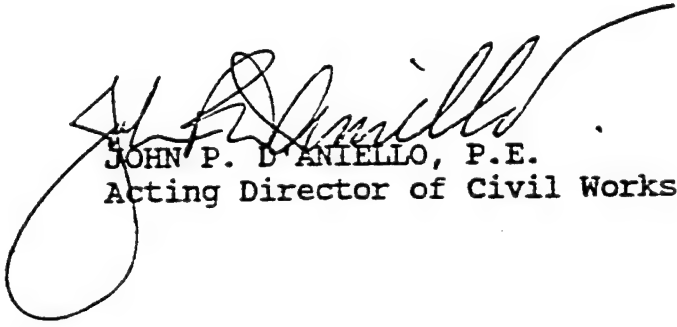
budgeting process. Using methodology described in this guidance,  
project and facility plans can be developed to totally eliminate  
the use of Class I ODSs.

(b) Funding these requirements could have varying degrees of  
impact on constrained budgets. To determine the extent of  
impact, MSCs should compile costs, by district, including  
laboratories and FOAs, to eliminate Class I ODSs. The estimated  
cost for each budget year, by projects and facilities, starting  
with the budget cycle for FY 1999 and continuing through FY  
2003, should be provided. This information needs to be compiled  
and forwarded to CECW-OA by 30 September 1996.

(c) 40 C.F.R. Part 82, Appendix A (List of Ozone Depleting  
Chemicals)

(d) 48 C.F.R. Part 23 (Ozone Depleting Substances)

10. Dissemination. Please use your Environmental Compliance  
Coordinator network to give this Guidance Letter as wide a  
distribution as possible.



JOHN P. D'AMIELLO, P.E.  
Acting Director of Civil Works



CECW-OA  
SUBJECT: USACE Operated Facilities Environmental Compliance  
Guidance Letter No. 6, Managing ODSs at USACE Projects and  
Facilities

Appendixes:

- A. Steps in ODS Elimination Planning
- B. Controlled Substances

APPENDIX A  
STEPS IN ODS ELIMINATION PLANNING

1. Step 1: Assign an ODS Elimination Coordinator

(a) It is recommended that MSC Commanders and District Commanders designate an ODS coordinator in the Operations element since most of the affected facilities and equipment are at operating projects. Laboratories and FOAs should also designate ODS coordinators. The intent is to provide senior leadership with a responsible individual to monitor execution of ODS elimination efforts throughout the division, district, laboratory, FOA, etc.

(b) ODS coordinators should be knowledgeable of USACE policies, and Federal, state and local regulations concerning ODSs, and be familiar with operations and maintenance of projects and facilities, especially those having refrigeration, air conditioning and fire suppression systems. ODS coordinators should be familiar with planning, programming and budgeting processes.

(c) It is further recommended that operational project managers and facility managers appoint an individual to oversee and coordinate ODS elimination efforts.

2. Step 2: Inventory ODS Equipment and Supplies

(a) The first task is to assemble an accurate inventory of all equipment which uses ODSs and an inventory of all ODS supplies on hand. The equipment inventory should include air conditioning, refrigeration, fire fighting systems, and all other ODS applications. These inventories will serve as the baseline for ODS elimination planning. The following information should be gathered as part of the equipment inventory process:

- (i) Location of equipment - area, building, and room;
- (ii) Ownership - determine if equipment is project, PRIP, logistics or personal property;
- iii) Equipment type - manufacturer, model, and serial number of affected components;
- (iv) Chemical used - identify the ODS used and amount of chemical contained in the system;
- (v) Operating record - include the date of installation and operating conditions of the system which apply primarily to

CECW-OA, Guidance Letter No. 6  
APPENDIX A: STEPS IN ODS ELIMINATION PLANNING

air conditioning and refrigeration units;

(vi) Maintenance record - include scheduled maintenance actions, emergency repairs, leaks, major overhauls and chemical recharges. The history of chemical requisition may be useful to supplement maintenance records; and

(vii) Future Plans - upcoming scheduled maintenance, building renovation, demolition plans or facility realignment.

(b) The information collected should include project and facility supplies and at least the following information:

(i) Chemical type - chemical name, new or recycled product (for quality control);

(ii) Storage location - building and ownership;

(iii) Allocation - specific-use dedicated chemical, and

(iv) Amount - total chemicals at that location, volume, weight, number of containers.

(c) Equipment and chemical stock inventories should be prepared in a format that can be updated over course of the ODS elimination program. Inventories will require periodic updating.

### 3. Step 3: Conservation Measures

(a) The next phase of ODS elimination planning is establishing maintenance processes for conserving and recovering ODS substances. Conservation measures, such as leak prevention, will be a main priority of on-going maintenance. By preventing leaks, the project or facility will have to procure fewer ODSs to replenish systems and will have a larger recoverable supply for reuse. For refrigeration and fire fighting systems, periodic checks using specialized chlorine detectors may be preferable. For air conditioning systems, especially those in detached mechanical rooms, fixed detectors may provide better protection against leaks. Fixed fire suppression systems can be checked by monitoring cylinder pressure gauges. If leakage occurs, systems must be repaired immediately. Without detection systems, leakage might progress to the point of reduced operating efficiency.

(b) Another conservation measure that can be implemented is the installation of high efficiency purge units on centrifugal air conditioning systems. The high efficiency purges prevent the venting of CFCs during normal operation. These purges are a low

cost method to conserve refrigerant and may be considered for equipment not immediately scheduled for retrofit or replacement.

#### 4. Step 4: ODS Recovery and Reuse

(a) After establishing accurate inventories, the operation al Project Manager or facility manager should then do an analysis or evaluation of each ODS application. Based on these evaluations, decisions can be made regarding how to deal with each ODS being used. The following paragraphs describe principal options.

(b) Halons installed in power distribution systems, computer facilities and other electronic systems should be recovered. CFCs should also be recovered from project or facility systems when retrofit or replacement occurs. CFCs recovered from projects or facilities may be reused at the same project or facility. CFCs should also be recovered, reclaimed and reused if the project or facility determines the expense of recovery and reclaiming equipment to be worthwhile as an interim alternative to disposing used ODS solvents.

#### 5. Step 5: Building the Elimination Plan

(a) With the information gathered from steps 1 through 4, Operational Project Managers or facility managers can build ODS elimination plans. The schedule for retrofitting or replacing equipment should be based on a priority assessment which is discussed in the following paragraphs.

(b) Retrofit refers to the modification of existing equipment so it can operate effectively with an alternative chemical. Recovery of the Class I ODS chemical and recharging the system with the replacement chemical is only part of the retrofit action. Frequently, additional system components should be replaced during retrofit actions. For example, fire fighting system nozzles and air conditioner lubricants should be compatible with the new chemicals used. The complexity and cost of these modifications should be evaluated when deciding between retrofit and replacement options.

(c) Replacement is the complete removal of an existing ODS dependent system and installation of a new system that uses an environmentally acceptable alternative chemical. In some cases, ODS containing equipment may no longer be needed and can be eliminated using approved disposal procedures. Only hermetically sealed ODS systems, such as water coolers and refrigerators, which require no ODS additions during maintainance, will be allowed to continue operating indefinitely and eventually be

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replaced through normal attrition and eliminated using approved disposal procedures.

(d) Decisions on whether to retrofit or replace hardware will be based on factors such as cost, condition, age, performance, and safety. Based on the information gathered during the inventory, the project or facility manager can determine which systems are in need of immediate attention, and which will be efficient and useful for a longer period. Those systems judged to be high priority for major maintenance should be retrofitted or replaced before those systems which are operating well. Listed below are some factors to consider when prioritizing and scheduling retrofits and replacements.

(i) High Priority System Indicators:

- o Frequent recharges, leaking components;
- o Obsolete, inefficient equipment;
- o Equipment near end of life in hours use or age;
- o Frequent maintenance and repair required; and
- o Building modernization scheduled.

(ii) Low priority system indicators:

- o Recent Installation;
- o Low maintenance, infrequent repair required;
- o CFC-13 refrigerant (no option available); and
- o System resistant to retrofit.

6. Step 6: Resourcing the Elimination Plan

See No. 9, Resourcing ODS Elimination, (a) and (b) of the Memorandum.

7. Step 7: Reporting Progress of the Elimination Plan

See No. 8, Yearly Updates, of the Memorandum.

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## APPENDIX B

## CONTROLLED SUBSTANCES

## Substances —Class I Controlled

Controlled substance	Ozone depletion weight
<b>A. Group I</b>	
CFCl <sub>3</sub> —Trichlorofluoromethane (CFC-11)	1.0
CCl <sub>2</sub> F <sub>2</sub> —Dichlorodifluoromethane (CFC-12)	1.0
CCl <sub>3</sub> F—Trichlorofluoromethane (CFC-113)	0.8
CF <sub>2</sub> Cl—Ccl <sub>2</sub> —Dichlorotetrafluoroethane (CFC-114)	1.0
CClF <sub>2</sub> CF <sub>3</sub> —(Mono) chloropentafluoroethane (CFC-115)	0.6
All isomers of the above chemicals	
<b>B. Group II</b>	
CF <sub>3</sub> Br—Bromochlorodifluoromethane (naton 1211)	3.0
CF <sub>3</sub> Br—Bromotrifluoromethane (naton 1301)	10.0
CF <sub>3</sub> Br—Dibromotetrafluoroethane (naton 2402)	6.0

Controlled substance	Ozone depletion weight
All isomers of the above chemicals	
<b>C. Group III</b>	
CF <sub>3</sub> Cl—Chlorotrifluoromethane (CFC-13)	1.0
C <sub>2</sub> F <sub>4</sub> Cl (CFC-111)	1.0
C <sub>2</sub> F <sub>3</sub> Cl <sub>2</sub> (CFC-112)	1.0
C <sub>2</sub> F <sub>2</sub> Cl <sub>3</sub> (CFC-211)	1.0
C <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> (CFC-212)	1.0
C <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> (CFC-213)	1.0
C <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> (CFC-214)	1.0
C <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> (CFC-215)	1.0
C <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> (CFC-216)	1.0
C <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> (CFC-217)	1.0
All isomers of the above chemicals	
<b>D. Group IV</b>	
CCl <sub>4</sub> —Carbon Tetrachloride	1.1
<b>E. Group V</b>	
C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub> —1,1,1-Trichloroethane (Methyl chloroform)	.1
All isomers of the above chemical, except for 1,1,2-trichloroethane.	

—Class II  
Controlled Substances

CHFCl <sub>2</sub> —Dichlorofluoromethane (HCFC-21)	(*)
CHF <sub>2</sub> Cl—Chlorodifluoromethane (HCFC-22)	0.05
CH <sub>2</sub> FCF <sub>2</sub> —Chlorofluoromethane (HCFC-31)	(*)
C <sub>2</sub> HFCF <sub>2</sub> —(HCFC-121)	(*)
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-122)	(*)
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-123)	0.02
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-124)	0.02
C <sub>2</sub> H <sub>2</sub> FCF <sub>2</sub> —(HCFC-131)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-132b)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-133a)	(*)
C <sub>2</sub> H <sub>2</sub> FCF <sub>2</sub> —(HCFC-141b)	0.12
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-142b)	0.06
C <sub>2</sub> HFCF <sub>2</sub> —(HCFC-221)	(*)
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-222)	(*)
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-223)	(*)
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-224)	(*)
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-225ca)	(*)
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-225cb)	(*)
C <sub>2</sub> HFC <sub>2</sub> Cl <sub>2</sub> —(HCFC-226)	(*)
C <sub>2</sub> H <sub>2</sub> FCF <sub>2</sub> —(HCFC-231)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-232)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-233)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-234)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-235)	(*)
C <sub>2</sub> H <sub>2</sub> FCF <sub>2</sub> —(HCFC-241)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-242)	(*)

C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-243)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-244)	(*)
C <sub>2</sub> H <sub>2</sub> FCF <sub>2</sub> —(HCFC-251)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-252)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-253)	(*)
C <sub>2</sub> H <sub>2</sub> FCF <sub>2</sub> —(HCFC-261)	(*)
C <sub>2</sub> H <sub>2</sub> F <sub>2</sub> Cl <sub>2</sub> —(HCFC-262)	(*)
C <sub>2</sub> H <sub>2</sub> FCF <sub>2</sub> —(HCFC-271)	(*)
All isomers of the above chemicals	

(\*) Reserved.